most of these individuals will remain in a relatively low tax bracket regardless of how much they vary from the median. Their estimated taxes were based on the tax rates adopted in December 2017 for single individuals. For years after 2018, nominal tax payments were inflated using an annual 2 percent inflation rate. Per CBO custom, we do not discount the income or tax revenues of future years.

To estimate the earnings of the DACA college graduates, we obtained data from thedream.us. Just under 3,000 students have received financial assistance from thedream.us. For these individuals, we have data on the college in which they are currently enrolled, their expected graduation, their choice of major, previous post-secondary education (a substantial proportion have already earned an associates degree), and their city and state of residence. While we do not have data on their academic performance, a student's area of study is much more relevant to post-college income.

We paired the educational data with income data we obtained from the financial technology company payscale.com, which has an estimated starting salary for college students based on degree, school, and major using reported salary data.<sup>20</sup> Our data set had 2,563 usable observations with sufficient data to assign an estimated starting salary. To generate an age-earnings profile, we used estimates from Thornton and his coauthors that found that salaries initially grow at a 4 percent real annual rate, gradually tapering to a 3 percent real annual rate after 10 years.

To account for the fact that most college students begin their employment careers midyear, we reduced first-year salaries by 60 percent. With this group as well, our tax estimates were based on the tax rates adopted in December 2017 for single individuals. We calculated estimated taxes for each individual for each year in their earnings profile, and then averaged over our entire sample, giving us a profile of average tax payments per college graduate that does account for earnings variability. As with the other two groups, we ascribed these average tax payments to each individual college graduate, beginning in the year they enter the labor force. Once again, we reduce the number of entrants to 75.6 percent of all graduates to reflect employment rates, and inflate nominal payments by a 2 percent inflation rate.

Three Possible Scenarios

The estimate derived above assumes that current DACA recipients are offered a legal way to stay in the country, attend university, and obtain productive employment. From a fiscal standpoint, this would be the most preferred outcome but two others are also possible. The second scenario is that DACA ends and the immigrants currently in the country under its protection will be deported to their countries of origin. Under this scenario, the U.S. government does not only fail to gain any tax revenue from current DACA recipients, but also has to locate and deport 800,000 individuals, a task that would cost over \$10 billion if it were feasible. <sup>21</sup>

The more likely scenario if Congress fails to reach a deal and current DACA recipients lose their legal status is that the vast majority remain in the country illegally and work largely in jobs that require little skill but can be done on a cash basis, allowing them to receive their wages under the table. A proportion might be able to obtain employment by using another person's Social Security Number, a common ruse, which would force them to pay income and payroll taxes, albeit without any ability to collect Social Security or other benefits. Of course, as residents and consumers, they would also continue to pay sales and excise taxes. Given that this activity would happen outside of the law, it is impossible to estimate the revenue impact beyond saying that it would fall somewhere between the first two scenarios.

## Estimating the Income and Tax Impacts of Repealing DACA

From the above analysis, we projected the number of DACA recipients in each of the four educational attainment categories for each year and then assigned them an income based on their experience and educational attainment by education (Table 1). For the college graduates we estimated a starting salary based on school and choice of major. The average DACA recipient will earn a salary of approximately \$73,921 per year for the 10-year period from 2019 to 2028. These earnings represent an equivalent gain to U.S. gross domestic product. Factoring in the 75.6 percent employment rate cited above and multiplying by the total number of DACA recipients, we estimate the ten-year GDP impact to be \$351 billion.

Table 1 DACA Recipients by Educational Category

	2010	2021	2000	2025	2025
	2019	2021	2023	2025	2027
Number					
HS degree only	184,767	199,719	209,687	216,031	218,749
Enrolled in College	193,389	165,564	122,726	81,945	47,128
Some college	190,547	208,521	221,908	231,164	236,846
College degrees	245,305	311,468	376,693	430,371	467,533
Total	814,008	885,272	931,014	959,511	970,256
Percentages					
HS degree only	22.7%	22.6%	22.5%	22.5%	22.5%
Enrolled in College	23.8%	18.7%	13.2%	8.5%	4.9%
Some college	23.4%	23.6%	23.8%	24.1%	24.4%
College degrees	30.1%	35.2%	40.5%	44.9%	48.2%
	100.0%	100.0%	100.0%	100.0%	100.0%
Average Earnings					
HS degree only	\$30,332	\$32,019	\$33,844	\$35,816	\$37,959
Enrolled in College	\$0	\$0	\$0	\$0	\$0
Some college	\$32,736	\$34,878	\$37,211	\$39,764	\$42,564
College degrees	\$63,216	\$69,963	\$76,810	\$84,671	\$93,383
Total	\$33,598	\$40,054	\$47,569	\$55,621	\$63,946

Note: "Some college" includes those with more than a high school and less than a college degree who are not currently enrolled in college.

Applying the appropriate tax rates, we also determined that government would gain \$39.2 billion in revenue from DACA recipients over the next ten years. Additionally, we can expect a FICA tax rate of 15.3 percent, resulting in payroll tax revenue of \$53.7 billion over the next ten years. Therefore, the total tax revenue impact would be \$92.9 billion. <sup>22</sup> The imputed tax revenue adds up to 25 percent of projected income, the majority of which is driven by FICA.

We projected out an additional year and found that, from the ten-year period comprising 2020 through 2029, the GDP impact would be \$384 billion, and the revenue impact would be \$43.6 billion. If we include the FICA tax (both the employer and employee share), we add an additional \$58.8 billion, for a total tax impact of \$102.4 billion.

It should be noted that salary estimates are based on data that are a few years old and may understate current incomes, and there is reason to believe that incomes will grow faster than

during the previous decade. These estimates do not include the cost of actually tracking down and physically removing all 690,000 DACA recipients from the country, a significant expenditure in itself that would increase the fiscal costs of DACA.

## **Comparisons with Other Estimates**

The above-mentioned Congressional Budget Office score the DREAM Act finds significantly lower revenue gains from DACA recipients than we do here. There are several reasons for this. The first is that CBO regards the income of DACA recipients as merely switching over from "underground" to legal status, and does not believe that this would result in much of a gain in income for those workers, an assumption that we think is without merit. What's more, the legislation would make these people become eligible for a large number of federal government welfare programs, which it believes would outweigh any tax revenue boost from their newfound legality.

CBO's methodology essentially assumes the formal employment of DACA recipients merely transfers income from the employer (who would have been taxed on that income had the employee not been hired) to the employee (who is then taxed on the transferred income). The CBO's estimate also contains offsets for health insurance premium support offered through the Affordable Care Act. However, our analysis suggests that DACA recipients who complete college--a significant proportion of the cohort--become significantly less likely to qualify for premium support soon after completing college.

Finally, CBO makes no allowance for the effects of education and specialization, conducted in a legal environment, on income. DACA recipients who complete college have the potential for considerable income growth, which would result in higher tax obligations and more revenue to the federal government. For these reasons, we estimate that the revenue cost to the federal government of reversing DACA would be substantially higher than the estimate implicitly contained in the DREAM Act.

It should also be noted that our cost estimates look only at the cost of fully reversing the current DACA program, whereas the DREAM Act contains other provisions providing a path to citizenship for immigrants beyond the status quo. A full scoring of the DREAM Act is beyond

the scope of this paper, and the differences found in this somewhat apples-to-oranges comparison are to be expected.

## **Conclusion**

Our revised findings from data of DACA recipients currently matriculating are consistent with our previous analysis and suggest that ending the deferred arrivals program would represent a significant cost to the United States Treasury and the broader economy. We estimate that reversing DACA would cost the U.S. economy \$351 billion from 2019 to 2028 in lost income, and that the U.S. Treasury would lose \$92.9 billion in revenue, including payroll taxes.

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# Health-related quality of life among Mexican-origin Latinos: the role of immigration legal status

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#### **ABSTRACT**

**Objective:** To assess the relationship between immigration legal status and related vulnerabilities and health-related quality of life (HRQoL) among Mexican-origin Latinos living in a U.S.-Mexico border region.

**Methods:** Data were obtained using multistage sampling from 393 Latino adults who took part in the 2009 San Diego Prevention Research Center community survey.

**Results:** Significant differences in HRQoL were found across immigration legal status subgroups. Vulnerabilities associated with HRQoL varied across immigration legal status subgroups, and only depression was associated with HRQoL regardless of immigration legal status.

**Conclusion:** Results from this study emphasize the need for policies and programs to facilitate access to preventive services, including mental health services, in order to maintain the health of at-risk Latino immigrants.

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Latinos; immigration legal status; undocumented; health; quality of life

#### Introduction

Immigration is a complex phenomenon and a major source of population growth and cultural change that influences health and well-being (APA 2012). In the United States (U.S.), approximately 82% of the population growth between 2005 and 2050 will be attributed to new immigrants and their descendants, with Latinos accounting for the largest population increase (60%) (Passel and Cohn 2008). Of the total U.S. foreign-born population, nearly half are Latinos (47%), and among those, the majority are non-citizens (71%) (IPC 2012). Mexicans, the largest Latino subgroup in the U.S., comprise the majority of the U.S. Latino population (64%) and approximately 11% of the total U.S. population (Gonzalez-Barrera and Lopez 2013). Of Latinos of Mexican origin in the U.S., about a third are foreign-born, and of these, approximately half (51%) are undocumented (Gonzalez-Barrera and Lopez 2013). Although undocumented immigration from Mexico into the U.S. is on a downward trend, a good proportion of undocumented Mexican families establish long-term residence in the U.S. (Krogstad and Passel 2015). Nevertheless, despite the aforementioned

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ETHNICITY & HEALTH ( 567

downward trend, the U.S. continues to be the primary destination for Mexican immigrants worldwide (Gonzalez-Barrera and Lopez 2013).

Immigrants have often been identified as a population at-risk for diminished health, as well as reduced healthcare access (Derose, Escarce, and Lurie 2007). However, foreignborn Latinos have been shown to have lower mortality rates and better health outcomes than their U.S.-born counterparts. Unfortunately, this health advantage is known to dissipate over time with increased length of time in the U.S. (Lara et al. 2005). Socioeconomic disadvantage, immigration legal status, limited English proficiency, stigmatization, and residential location have been identified as important sources of vulnerability that increase health risk among immigrant populations, including Latinos (Derose, Escarce, and Lurie 2007). Yet, more attention is needed to identify health disparities and risk factors among hidden or hard-to-reach Latino immigrant subgroups, including the undocumented.

Immigration legal status is an important social determinant of health contributing to health disparities among Latinos (Derose, Escarce, and Lurie 2007). In the U.S., access to most health and social services is selective and often based on access to health insurance and/or immigration legal status. For instance, under The Patient Protection and Affordable Care Act (PPACA), a law intended to expand access to insurance coverage for underand uninsured people in the U.S., undocumented immigrants are banned from purchasing health insurance, even if they are willing to pay for it themselves (PPACA 2010). The lack of access to health insurance, insufficient financial resources, and limited knowledge of the U.S. healthcare system are some common barriers faced by undocumented immigrants, which increase health risks (Derose et al. 2007). Also, the adverse circumstances under which many undocumented immigrants enter the U.S., the substandard conditions in which many of them live and work, the language barriers faced, and the distress associated with living life without proper documentation are additional risk factors likely to diminish well-being among this immigrant subgroup (Kullgren 2003; Garcini et al. 2016). In a study exploring the association of self-reported health and fear of deportation, results showed that undocumented immigrants with fear of deportation reported their health status as substandard when compared to those without fear (Cavazos-Rehg, Zayas, and Spitznagel 2007). Research to explore determinants of health among the undocumented has increased considerably within the past decade (Garcini et al. 2016; Martinez et al. 2015); however, there continues to be a need for studies documenting the health needs of hard-to-reach Latino immigrants, particularly the undocumented. This information is necessary to inform contextually sensitive intervention and policy efforts.

Although physiological measures are often used in the study of health disparities, the importance of identifying differences in health-related quality of life (HRQoL) among at-risk populations is becoming important to inform prevention efforts, patient management, and policy decisions (Guyatt, Feeny, and Patrick 1993). While physiological measures often correlate poorly with functional capacity and well-being, HRQoL provides a more dimensional perspective of health status, which includes dimensions not often captured by physiological measures (Guyatt, Feeny, and Patrick 1993). HRQoL is a multidimensional construct that encompasses different life domains, such as symptomatology, functional ability and social activity among others, to obtain a measure of overall quality of life (Gold 1996). The assessment of HRQoL is an important construct in health surveillance given that it provides additional information to traditional measures of morbidity and mortality, thus helping determine service needs and the burden of preventable disease, injury and disability in at-risk populations (Gold 1996). Studying the HRQoL of Latino immigrants varying in immigration legal status is necessary to identify the most vulnerable subgroups, as well as to distinguish relevant risk and protective factors to inform a better allocation of resources, the development of context-sensitive interventions, and effective policy efforts.

## Conceptual framework and purpose of study

The socio-ecologic framework (Bronfenbrenner and Morris 2006) and the minority stress model (Meyer 2003) were used as theoretical frameworks for this study. From a socio-ecological perspective, 'human experience results from reciprocal interactions between individuals and their environments, varying as a function of the individual, his or her context, and over time' (APA 2012, 4). This means that human experience, including the experiencing of HRQoL, varies across subgroups depending on exposure to different sociopolitical and economic environments (Bronfenbrenner and Morris 2006; Serdarevic and Chronister 2005). Further, from the perspective of the minority stress model, individuals from stigmatized groups, including undocumented immigrants, face chronic stressors imposed by social and cultural structures that require them to exert greater effort to cope with stress, which in turn increase vulnerability and increases risk for diminished well-being (Meyer 2003). For instance, the experiences and HRQoL of undocumented immigrants likely differs from those of their documented counterparts. Having restricted access to healthcare and experiencing distress from living life as undocumented are common experiences to undocumented immigrants (Garcini et al. 2016), which may affect HRQoL differently than for their documented counterparts. In addition to immigration legal status, other sources of vulnerability for undocumented immigrants include socioeconomic disadvantage and limited English proficiency (Derose, Escarce, and Lurie 2007). The aforementioned factors have been found to increase health risks among different immigrant populations (Derose, Escarce, and Lurie 2007); however, there is limited information as to how these factors may be associated with HRQoL among subgroups of Latinos varying in immigration legal status. Thus, from a socio-ecological perspective and using the minority stress model as framework, this study aims to assess the relationship between immigration legal status, relevant vulnerabilities, and HRQoL among Latinos (primarily of Mexican-origin). Specifically, this study sought to answer two questions:

- 1. How do Latinos varying in immigration legal status differ in HRQoL?
- 2. After controlling for age and gender, how does the association of HRQoL and relevant vulnerabilities, specifically specifically socio-economic status (SES), length of time in the U.S., language use/proficiency, and health status, differ across immigration legal status subgroups?

#### Methods

This cross-sectional study used data collected in the 2009 San Diego Prevention Research Center (SDPRC) biannual community survey, which assessed various aspects of health among Latinos living in the California-Mexico border region. Multistage sampling

methods were used to select participants. Two hundred census blocks from four highdensity Latino communities were randomly selected. To be eligible for participation, the household had to have at least one self-identified Latino (age ≥ 18) who lived in the house at least 4 or more days per week. One adult per household was interviewed. A total of 4123 households were selected at random, of which 3948 were visited. Of the households visited, 43.7% (N = 1726) met eligibility criteria. Of these, 23% (N = 397) consented to participation. Four of these participants were excluded due to missing data.

#### **Procedures**

Trained bilingual, bicultural research assistants conducted home visits to assess eligibility and conduct a single face-to-face interview. Participants completed a 90-minute interview and measurement of their height and weight. They were given the choice of answering questions in English or Spanish. No compensation was provided for participation.

## Dependent variable

The outcome variable was HRQoL, and was assessed using the quality of well-being scale (QWB) (Kaplan, Sieber, and Ganiats 1997). The QWB is a multidimensional and generic measure of HRQoL, meaning it can be used to assess quality of life associated with multiple health outcomes (Kaplan 1995; Saban 2008). The QWB combines preferenceweighted measures of symptoms and functions to produce a single score. The derived QWB score is a continuous variable that has demonstrated interval properties (Blischke, Bush, and Kaplan 1975). The score is made up of four components: mobility, physical activity, social activity, and a list of symptom and problem complexes. Response choices for the aforementioned four components vary and include qualitative and quantitative formats. For instance, quantitative responses include dichotomous answers (yes/ no) for the presence of symptoms/problems, as well as number of days during the past six days in which symptoms/problems were present (i.e. none, all, some but not all). Quantitative responses assess the etiology of problems/symptoms or to provide further clarification to quantitative answers. The QWB score ranges from 0.0 (for dead or condition considered equivalent) to 1.0 for optimal health defined as having 'no symptoms' or no functional limitations. The QWB has been translated into Spanish and has demonstrated evidence of cross-cultural validity (Hector et al. 2010).

#### **Immigration legal status**

This was assessed using three questions from the 2007 Boston Metropolitan Immigrant Health and Legal Status Survey (BM-IHLSS) including: (1) Are you a citizen of the U.S.? (2) Do you have a legal permanent residency (green, brown, or pink) card that permits you to reside in the U.S.? and (3) Do you have a visa that permits you to reside in the U.S. temporarily? (Marcelli, Holmes, and Estella 2009). Using a rule out system to protect the confidentiality of respondents, the aforementioned questions were used to derive the following legal status categories: (0) U.S.-born citizens to denote respondents born in the U.S., (1) naturalized citizens to denote respondents born outside the U.S., but who have obtained citizenship through naturalization, (2) non-citizen legal residents to

denote foreign-born respondents who were not naturalized citizens, but who have permission from the government to reside in the U.S. either permanently or temporarily, and (3) non-permanent or undocumented to denote foreign-born respondents without permanent authorization from the government to reside in the U.S.

## Independent variables

## Demographic and socioeconomic factors

A continuous variable was used to assess age (calculated from respondent's date of birth). Dichotomous variables were used to assess gender (female = 0; male = 1), educational attainment (<high school = 0; ≥high school = 1), employment (unemployed= 0; employed = 1) and poverty status (living below the federal poverty level = 0; or above = 1). Demographic questions were modeled after the 2008 Behavioral Risk Factor Surveillance System (CDC 2009) and the U.S. Census Bureau (U.S. Census Bureau 2009).

## **Immigration-related factors**

A continuous variable was used to assess for years in the U.S. The Bidimensional Acculturation Scale for Hispanics (BAS) was used to assess language use and proficiency (Marin 1996). The BAS is a 12-item measure that uses a Likert scale to produce two scores, one representing the continued use and proficiency of Spanish (Hispanic domain) and a second representing use and proficiency of English (non-Hispanic domain). The BAS renders a total mean score for each of the aforementioned dimensions, with higher scores denoting higher language use/proficiency to its respective domain. A score of 2.5 has been used as a cut-off to indicate low or high language use/proficiency to each domain (<2.5 = low language use/proficiency,  $\ge 2.5 = greater$  language use/proficiency). The BAS has shown previous evidence of validity and high internal consistency (Marin 1996).

#### Health status

Health status characteristics included: (1) presence of a chronic medical condition; (2) body mass index (BMI), and (3) depression. Having a chronic illness, susceptibility to disease, and mental health are associated with HRQoL (CDC 2003), although studies exploring the association of health status and HRQoL among Latino immigrants are limited. Modeling our questions on the 2008 Behavioral Risk Factor Surveillance System (CDC 2009) and the U.S. Census Bureau (2009), participants answered whether they had been diagnosed with one of the following chronic medical conditions using a Yes/No scale: diabetes, heart disease, hypertension, high cholesterol, asthma, cancer, pain, and/or mental illness. Based on the responses, the presence of having one or more diagnosed chronic medical conditions was computed (Yes = 1 one or more chronic conditions; and No = 0 no chronic condition). BMI was used to assess susceptibility to disease given its prevalence among Latinos (U.S. DHHS 2012), and its significance as a risk factor for many chronic illnesses (CDC 2003). BMI was measured as a continuous variable. It was calculated from the objective measurement of height and weight using National Health and Nutrition Examination Survey protocols (CDC 2003). Depression was assessed

ETHNICITY & HEALTH ( 571

using the Patient Health Questionnaire (PHQ-9), a widely used measure with well-established psychometric properties (Kroenke, Spitzer, and Williams 2001). The PHQ-9 renders a total score ranging from 0 to 27, with higher scores denoting greater symptoms of depression.

#### Statistical analyses

Analyses were conducted using SPSS, Version 22.0. Relationships between categorical variables were assessed using chi-square. Differences in HRQoL across immigration legal status groups were assessed using one-way between-group analysis of variance. To identify vulnerabilities associated with HRQoL, hierarchical multiple regression was used. Specifically, multiple sequential linear regressions were undertaken to facilitate identifying variations in factors associated with HRQoL for each immigration legal status subgroup. Given that the relationship between demographic factors (age and gender) and HRQoL is well established in the literature (e.g. Renzaho, Wooden, and Houng 2010), these factors were entered first in the model (step 1). Subsequently, to test for the effect of different vulnerabilities on HRQoL using the socio-ecologic and the minority stress model as frameworks, socioeconomic factors (poverty, employment, and education) were entered at step 2, followed by immigration-related factors (years in U.S. and language proficiency) entered at step 3, and health status variables (BMI, depression, having a chronic condition) entered as the last step. All tests were set at p < .05.

#### Results

#### Sample characteristics

Most participants completed the interview in Spanish (89%). Participants' characteristics are summarized in Table 1. The sample was predominantly female (73%). The mean age was 44 years (SD = 16.9), with undocumented immigrants being significantly younger when compared to non-citizen legal residents and U.S. citizens. About half the sample had less than a high school education (54%), with a greater number of non-citizen legal residents and undocumented immigrants not having completed high school when compared to their citizen counterparts. Also, approximately 54% was unemployed, with no significant differences across legal status subgroups. More than half lived in poverty (53%), with a greater number of undocumented immigrants living in poverty when compared to their citizen and non-citizens legal resident counterparts. Also, most foreign-born participants were from Mexico (except 4 participants) and on average undocumented immigrants had lived less time in the U.S. (M = 11.9, SD = 7.4) when compared to citizens and non-citizen legal residents. On average, the sample reported a high level of English language use/proficiency, with citizens (U.S. born and naturalized) reporting greater use/proficiency when compared to non-citizen legal residents and those with undocumented status. Also, on average, there was a high level of Spanish language use/proficiency (M = 3.6, SD = 0.5), with non-citizen legal residents and the undocumented reporting higher levels when compared to their citizen counterparts. Almost half of participants reported having at least one or more chronic medical conditions (49%), with fewer undocumented immigrants reporting having a chronic condition. Average BMI was 30.4 (SD = 6.4), which

**Table 1.** Sample characteristics by immigration legal status.

	Non-citizen legal							
Characteristics	Ν	% or M (SD)	US citizens	residents	Undocumented	р		
All	393	100	196 (50%)	121 (31%)	76 (19%)			
HRQoL								
QWB (M, SD)	393	0.742 (0.138)	0.741 (0.143)	0.722 (0.140)	0.778 (0.113)	.021		
Age (M, SD)	391	43.7 (16.9)	45.1 (18.1)	46.9 (16.4)	35.1 (10.8)	<.001		
Sex								
Men	106	27%	52 (27%)	33 (27%)	21 (28%)	.979		
Women (ref)	287	73%	144 (73%)	88 (73%)	55 (72%)			
Poverty level								
Above	133	45%	80 (54%)	37 (46%)	16 (30%)	.005		
Below (ref)	161	55%	68 (46%)	56 (54%)	37 (70%)			
Employment								
Employed	181	46%	90 (46%)	51 (42%)	40 (53%)	.356		
Unemployed (ref)	212	54%	106 (54%)	70 (58%)	36 (47%)			
Education								
≥High school	181	46%	109 (56%)	44 (36%)	28 (37%)	.001		
<high (ref)<="" school="" td=""><td>212</td><td>54%</td><td>87 (44%)</td><td>77 (64%)</td><td>48 (63%)</td><td></td></high>	212	54%	87 (44%)	77 (64%)	48 (63%)			
Years in US (M, SD)	303	20.7 (13.5)	29.1 (12.8)	18.9 (12.8)	11.9 (7.4)	<.001		
Language use/proficiency								
English use/proficiency ( <i>M</i> , SD)	393	2.5 (0.9)	2.8 (0.9)	2.0 (0.8)	2.2 (0.7)	<.001		
Spanish use/proficiency (M, SD)	393	3.6 (0.5)	3.41 (0.6)	3.7 (0.3)	3.7 (0.4)	<.001		
BMI (M, SD)	373	30.4 (6.4)	31.1 (7.0)	30.3 (5.0)	28.8 (6.4)	.038		
Depression								
PHQ-9 ( <i>M</i> , SD)	391	4.3 (4.7)	4.0 (4.6)	4.7 (5.3)	4.6 (4.0)	.454		
Chronic medical condition								
Yes	193	49%	106 (54%)	71 (59%)	16 (21%)	<.001		
No (ref)	199	51%	89 (46%)	50 (41%)	60 (79%)			

denotes that the majority of the sample was obese regardless of immigration legal status. Overall, the sample reported minimal levels of depression (M = 4.3, SD = 4.7), with no differences observed across immigration legal status groups. (Tables 2 and 3).

## Disparities in HRQoL across immigration legal status groups

There was a statistically significant difference in QWB scores across immigration legal status groups: F(2, 390) = 3.898, p = .021. Despite reaching statistical significance, the actual difference in mean scores between the groups was small (eta squared = .02). Posthoc comparisons using the Tukey honestly significant difference test indicated that the mean score for non-citizen legal residents (M = 0.722, SD = 0.139) was significantly different from that of undocumented immigrants (M = 0.778, SD = 0.113). No other significant differences in QWB mean scores were observed across the groups.

## Association of HRQoL with demographic and socioeconomic factors

Overall, after controlling for age and gender, socioeconomic factors (specifically poverty) were significantly associated with QWB scores only among undocumented immigrants, but not among citizens and non-citizen legal residents. Among undocumented immigrants, SES explained 15% of the variance in QWB scores after controlling for age and gender. More specifically, poverty status was statistically significant, with undocumented immigrants living above the poverty level reporting better HRQoL ( $\beta$  = 0.39, p = .006).

Table 2. Hierarchical multiple regression analysis for variables associated with QWB scores by immigration legal status (unstandarized beta coefficients).

	HRQoL (QWB scores)											
	US citizens (n_=_151)				Non-citizen legal residents (n=109)				Undocumented (n=49)			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
$R^2$	0.09	0.13	0.14	0.43	0.17	0.19	0.32	0.51	0.14	0.29	0.36	0.49
$(\Delta R^2)$	_	-0.04	-0.02	-0.29	_	-0.02	-0.12	-0.2	_	-0.15	-0.06	-0.14
F statistics	3.90*	2.26	1.56	4.92***	8.78***	3.96**	4.55***	7.32***	4.11*	3.90**	3.02**	3.63***
Step 1: demographics												
Age	-0.002**	-0.002*	-0.002	-0.001	-0.004***	-0.003***	-0.001	-0.001	-0.002	-0.002	-0.003*	-0.003*
Men	0.036	0.032	0.03	-0.011	0.019	0.017	0.036	0.021	0.072*	0.031	0.038	0.04
Step 2: socioeconomic												
Above poverty level	_	0.022	0.017	0.016	_	0.012	0.012	0.002	_	0.095**	0.108**	0.076*
Employed	_	0.049	0.045	0.027	_	0.035	0.031	0.025	_	0.03	0.031	0.021
≥High school	_	-0.005	-0.01	-0.011	_	-0.023	-0.048	-0.021	_	0.029	0.037	0.036
Step 3: migration												
Years in U.S.	_	_	0.001	0.001	_	_	-0.003*	-0.002*	_	_	0.004	0.003
Spanish use/proficiency	_	_	0.031	0.021	_	_	0 0.103*	0.096*	_	_	-0.012	-0.002
English use/proficiency	_	_	0.022	0.017	_	_	0.050*	0.03	_	_	-0.018	0
Step 4: health												
Body mass index	_	_	_	-0.002	_	_	_	-0.001	_	_	_	0.002
Depression (PHQ9)	_	_	_	-0.014***	_	_	_	-0.011***	_	_	_	-0.011**
Having chronic condition	_	_	_	0.056	_	_	_	0.035	_	_	_	-0.009

<sup>\*</sup>p < .05; \*\*p < .01; \*\*\*p < .001.

Table 3. Hierarchical multiple regression analysis for variables associated with QWB scores by immigration legal status (standarized beta coefficients).

	HRQoL (QWB scores)											
		US citizer	ns (n <sub>=</sub> 151)		Non-citizen legal residents ( $n = 109$ )				Undocumented (n = 49)			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
$R^2$	0.09	0.13	0.14	0.43	0.17	0.19	0.32	0.51	0.14	0.29	0.36	0.49
$(\Delta R^2)$	_	-0.04	-0.02	-0.29	_	-0.02	-0.12	-0.2	-	-0.15	-0.06	-0.14
F statistics	3.90*	2.26	1.56	4.92***	8.78***	3.96**	4.55***	7.32***	4.11*	3.90**	3.02**	3.63***
Step 1: demographics												
Age	-0.278**	-0.257*	-0.293	-0.173	-0.410***	-0.398***	-0.137	-0.118	-0.231	-0.233	-0.302*	-0.326*
Men	0.112	0.098	0.093	-0.033	0.06	0.055	0.114	0.066	0.285*	0.123	0.151	0.157
Step 2: socioeconomic												
Above poverty level	_	0.078	0.061	0.055	_	0.043	0.043	0.007	_	0.387**	0.440**	0.311*
Employed	_	0.172	0.158	0.093	-	0.124	0.109	0.09	_	0.131	0.139	0.095
≥High school	_	-0.018	-0.035	-0.037	-	-0.079	-0.167	-0.074	_	0.122	0.16	0.154
Step 3: migration												
Years in U.S.	_	_	0.103	0.082	_	_	-0.285*	-0.210*	_	_	0.239	0.196
Spanish use/proficiency	_	_	0.137	0.094	_	_	0 0.226*	0.211*	_	_	-0.044	-0.005
English use/proficiency	_	_	0.131	0.105	_	_	0.280*	0.165	_	_	-0.111	0.001
Step 4: health												
Body mass index	_	_	-	-0.087	_	_	_	-0.045	_	_	_	0.119
Depression (PHQ9)	_	_	-	-0.465***	-	-	_	-0.428***	_	_	-	-0.392**
Having chronic condition	_	_	-	0.194	-	_	_	0.123	_	-	-	-0.031

<sup>\*</sup>p < .05; \*\*p < .01; \*\*\*p < .001.

## Association of HRQoL with immigration-related factors

Overall, after controlling for age, gender, and SES, immigration-related factors were significantly associated with QWB scores only among non-citizen legal residents, but not among citizens and undocumented immigrants. More specifically, among non-citizen legal residents, immigration-related factors explained 12% of the variance in QWB scores, with less time living in the U.S. ( $\beta = -0.29$ , p = .015), higher English language use/proficiency ( $\beta = 0.28$ , p = .026), and higher Spanish language use/proficiency ( $\beta =$ 0.23, p = .025) being significantly associated with better HRQoL after adjusting for age, gender, and SES.

#### Association of HROoL with health status

Overall, after controlling for age, gender, SES, and immigration-related factors, health status (specifically depression) was found to be significantly associated with HRQoL among all three immigration legal status groups. Also, health status accounted for the largest proportion of variance in QWB scores for all three groups. More specifically, among citizens, health status explained 29% of the variance in QWB scores, with depression being significantly associated with HRQoL ( $\beta = -0.47$ , p < .001). Specifically, reporting more symptoms of depression was associated with lower HRQoL. Similarly, among non-citizens, health status explained 20% of the variance in QWB scores, with greater symptoms of depression associated with diminished HRQoL ( $\beta = -0.43$ , p < .001). Among undocumented immigrants, health status explained 14% of the variance in QWB scores, with greater symptoms of depression associated with diminished HRQoL ( $\beta = -0.39$ , p = .003).

#### **Discussion**

This study explored the effects of immigration legal status and related vulnerabilities on HRQoL among Latinos, mostly of Mexican-origin, varying in immigration legal status. Although statistically significant differences in HRQoL were observed between noncitizen legal residents and undocumented immigrants, these differences were small. Overall, the QWB scores for all immigration legal status groups reflected a good HRQoL. In other words, regardless of immigration legal status, on average, participants reported few symptoms or health problems and a good level of functional ability and social activity. Nonetheless, two considerations are worth noting. First, previous research shows that Latinos have a tendency to underreport distress (Huang et al. 2006). Second, previous studies have shown that Latinos are less likely to report limitations in functional ability even when experiencing significant mental or physical symptoms (Huang et al. 2006). Also, research on stigma suggests that the aforementioned response patterns may be even more likely among stigmatized populations (e.g. undocumented immigrants) given they are used as coping strategies to defy negative stereotyping (Major and O'Brien 2004). Thus, although this sample reported having good HRQoL regardless of immigration legal status, it is also possible that biases in self-reporting of symptoms and functional ability may have moderated differences in HRQoL that were noted across the groups. Additional research is needed to identify differences in self-reported HRQoL among Latinos varying in immigration legal status, with special attention given as to how response patterns differ between the groups. This information would be valuable to inform the development of HRQoL assessments and interventions in ways that are context sensitive to better address the health needs of different Latino immigrant subgroups.

In addition to the identification of disparities, our study explored the association of HRQoL and relevant vulnerabilities across different immigration legal status groups. Among U.S. citizens, our results showed that after controlling for age and gender, neither SES, years lived in the U.S. or language use/proficiency were associated with HRQoL. Only depression scores were associated with HRQoL, with greater levels of depression associated with poorer HRQoL. This finding was consistent for all three immigration legal status groups. Although no causal inference may be established in this study for the association of depression and HRQoL, this finding is consistent with research that supports the bidirectional and additive effect of mental health distress, including depression, on physical health and quality of life (Chowdhury, Balluz, and Strine 2008). Given that treatment of depression is an effective way to improve overall health and quality of life (U.S. DHHS 1999), increasing access to and use of mental health services should be prioritized as a public health strategy to improve Latino HRQoL. Unfortunately, when compared to other ethnic/racial groups, Latinos underutilize mental health services (Alegria et al. 2002). Devising prevention interventions and educational campaigns to reduce stigma about mental health, as well as increasing the use of mental health services among Latinos is necessary to improve HRQoL. This requires, among other things, increasing awareness about prevalent mental health disorders, their etiology, and treatment effectiveness, reducing myths about mental health and its treatment, developing a better understanding of the effects of stress on HRQoL, and facilitating access to purchase health insurance on the exchanges. The Affordable Care Act (ACA) intends to expand mental health benefits and parity protections by making mental health services more accessible and affordable (Protection and Act 2010). However, such benefits will only be achieved if resources are allocated to provide Latinos with sufficient knowledge about insurance marketplaces and its use to access needed services. Moreover, the delivery of health services, including mental health services, through non-traditional sources in the community (e.g. religious organizations, community-based organizations, and safety-net providers) may facilitate access to mental health services even among the most marginalized subgroups. Advocating for funding to support the delivery of the aforementioned services is also necessary.

Among non-citizen legal residents, although SES factors were found not to be associated with HRQoL, certain immigration and health characteristics were associated with HRQoL. Specifically, longer time living in the U.S. was associated with poorer HRQoL, which is consistent with previous studies documenting a decline in well-being the longer an immigrant resides in the U.S. Immigration is often a complicated process that presents multiple stressors and complex challenges, which over time may compromise health, particularly when faced with socioeconomic disadvantage, hostile environments, and limited access to needed health services (Garcini, in press). Identifying protective factors to facilitate adjustment and ameliorate distress associated with the immigrant experience is essential to prevent deterioration in the well-being of this immigrant population. For example, results from this study also showed that among non-citizen legal

ETHNICITY & HEALTH ( 577

residents, greater Spanish language use/proficiency was associated with better HRQoL. The health benefits of bilingualism have been well documented and range widely from neurological benefits and increased 'cultural flexibility' (Schachter, Kimbro, and Gorman 2012) to facilitating increased access to healthcare (Derose, Escarce, and Lurie 2007). Additionally, among Latino immigrants already fluent in English, speaking Spanish may have different indirect effects on HRQoL by expanding social support (e.g. helping maintain connections to the Spanish-speaking community) and facilitating access to employment, which may foster functional ability (Schecter, Sharken-Taboada, and Bayley 1996). Thus, in facilitating access to resources, networks, and employment, being bilingual is likely to have a positive effect on the HRQoL of Latino immigrants.

Finally, among undocumented immigrants, results showed that age, poverty, and mental health were associated with HRQoL. Specifically, older age and living in poverty were associated with poorer HRQoL. Despite being, on average, a younger and healthier population when compared to their legal counterparts, undocumented immigrants face restricted access to healthcare, which is particularly problematic with increased age and limited financial resources. Given that undocumented immigrants are not allowed to shop for coverage in the insurance marketplace, this creates a health problem, particularly for the elderly, which can exacerbate costly prevalent diseases such as diabetes, obesity, or mental health illness (Wallace et al. 2013). Moreover, results showed that undocumented immigrants reporting greater levels of depression also reported poorer HRQoL, which is consistent with previous research emphasizing the effects of psychological distress on health and quality of life (Chowdhury, Balluz, and Strine 2008). Revisions to current health policies and the development of new alternatives to facilitate purchasing of health insurance for the undocumented, as well as allocation of additional funding to support safety-net providers in high-density Latino immigrant communities, is necessary to prevent the deterioration of health among undocumented immigrants, particularly the elderly and those living in poverty.

#### **Limitations**

This study has some limitations. First, this study relied on self-report and retrospective data, which may have led to over/under estimation of reported HRQoL and related vulnerabilities (e.g. health status). Second, disclosure of legal status is a sensitive matter; thus, some respondents, particularly undocumented immigrants, may have misrepresented their legal status (e.g. temporary residents), which may result in more conservative estimates. Third, the 23% cooperation rate may reflect a self-selection bias. Regardless, it is important to note that this response rate is similar to that of large state surveys in California when conducted in urban areas (e.g. California Health Interview Survey (CHIS); California Behavioral Risk Factor Surveillance System (BRFSS) (CHIS 2007)). Also, this survey used multistage sampling to minimize threats to external validity, and as a result, the sample included adequate variation in the immigration legal status of participants. Similarly, this sample was predominately female; thus, this study may not adequately represent HRQoL among males in this region. Unfortunately, the number of men does not allow for stratified analyses by gender. A similar study with a larger sample of men is necessary to better understand factors affecting the HRQoL of undocumented Latino men. Previous research shows that when compared to women, undocumented men are at higher risk of clinically significant psychological distress, which in turn may have a negative effect on health and HRQoL (Garcini et al. 2016). For instance, experiencing unsafe and harsh working conditions, facing constant institutional and societal exclusion due to undocumented status, experiencing loneliness and loss of self-identity as many men immigrate alone, and having the pressure of conforming to cultural norms (e.g. *machismo*) which preclude men from expressing distress and seeking needed help, are some of the many risk factors affecting the health of undocumented Latino men (Garcini et al. 2016). Also, for parsimony, discrimination as a source of vulnerability was not included in the proposed model. Future studies should consider exploring the effect of lifetime and every-day discrimination on HRQoL across subgroups of Latinos varying in immigration legal status. Furthermore, the generalizability of this sample is limited to mostly Mexicans and Mexican-Americans and those living on the California-Mexico border; the extent to which study findings are representative of other Latinos in the U.S. is unknown. Similar studies with other parts of the U.S. and with other Latino population are needed. Finally, given the cross-sectional nature of this study, causality cannot be inferred.

#### **Conclusions**

Overall, the socio-demographic profile of study participants is consistent with previously reported descriptions of SES disparities across subgroups of Latinos varying in immigration legal status (Passel and Cohn 2008). Nonetheless, regardless of SES disparities, results suggest that undocumented immigrants have similar health and functional status as their documented counterparts. Although the relationship of HRQoL and length of stay in the U.S. was not supported for undocumented immigrants, an inverse relationship for HRQoL and length of stay was supported for their documented counterparts (non-citizen legal residents). This seems consistent with the healthy immigrant paradox (Franzini, Ribble, and Keddie 2001), which suggests that these immigrants may arrive to the U.S. in better health than their U.S. born counterparts, but that this health advantage may deteriorate over time. Additionally, it is important to highlight that the deterioration in health among the foreign-born could be associated with health inequities, but further research incorporating data on access to and utilization of health services is required to confirm such a hypothesis. Nevertheless, the development of strategies and policies to facilitate access to preventive health services and health promotion programs is necessary to prevent a health decline among at-risk immigrants, as well as to continue to ensure a productive workforce.

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Our research was approved by the San Diego State University and University of California San Diego Institutional Review Boards and all procedure followed were in accordance with the respective ethical standards and the Helsinki Declaration of 1974, as revised in 2000. Informed consent was obtained from all participants being included in the study.

#### **Disclosure statement**

No potential conflict of interest was reported by the authors.

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## Case 1:18-cv-00068 Document 611-1 Filed on 11/04/22 in TXSD Page 22 of 704

ETHNICITY & HEALTH ( 581



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#### 85 Mich. L. Rev. 152

Michigan Law Review October, 1986

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## EXTENDED VOLUNTARY DEPARTURE: LIMITING THE ATTORNEY GENERAL'S DISCRETION IN IMMIGRATION MATTERS

Fifteen times in the past quarter-century, the Attorney General has decreed that aliens of certain nationalities could temporarily remain in the United States regardless of their visa status. <sup>1</sup> Government officials have characterized these grants of blanket extended voluntary departure (EVD) <sup>2</sup> as a means of protecting aliens from life-threatening conditions in their homelands. <sup>3</sup> The Attorney General's actions were apparently undertaken for humanitarian reasons <sup>4</sup> and went largely unnoticed \*153 by the public. <sup>5</sup>

Recently, however, the Attorney General denied EVD status to Salvadoran nationals, <sup>6</sup> despite the perilous conditions faced by those forced to return to El Salvador. <sup>7</sup> This denial has sparked controversy in the press <sup>8</sup> and one court case—*Hotel & Restaurant Employees Union, Local 25 v. Smith.* <sup>9</sup> For the first time, the source and nature of \*154 EVD status are being examined and questioned. Unfortunately for Salvadorans and similarly situated aliens, the United States District Court for the District of Columbia granted summary judgment for the defendants in *Employees Union*, finding that EVD is 'a matter of the Attorney General's absolute discretion on issues of foreign and prosecutorial policy, <sup>10</sup> and thus not subject to judicial review beyond an initial examination into whether the Attorney General's decision had a rational basis. <sup>11</sup> In so holding, the *Employees Union* court ratified the extrastatutory nature of this status and recognized broad, nearly unbridled discretion in the Attorney General.

In refusing to review the Attorney General's decision, the *Employees Union* court followed the traditional restrictive view of judicial involvement in immigration law, which assumes that immigration matters are entitled to substantial judicial deference. <sup>12</sup> This view, which has dominated our legal tradition for the past century, is now being challenged by a new vision of immigration law marked by heightened judicial scrutiny and a recognition of the rights accruing to aliens simply because of their intrinsic human worth. <sup>13</sup> This Note argues that, because of the important interests at stake, EVD is more properly examined under this incipient legal tradition.

Part I of this Note defines EVD and distinguishes it from related forms of deportation relief. Part II describes the *Employees Union* court's holding. The evolution of American perceptions of immigration law is laid out in Part III and the concept of 'communitarianism' is explored. Part IV investigates the source of EVD and concludes that EVD arises not from the discretionary enforcement of the immigration laws, but from the voluntary departure provisions of the Immigration and Nationality Act of 1952 (INA). <sup>14</sup> Thus, Part V finds that EVD determinations should be subject to narrow judicial review for abuse of discretion under the Administrative Procedure Act (APA) <sup>15</sup> and urges that a 'reasons requirement' be imposed on the Attorney General. Part VI concludes by integrating EVD into the communitarian model.

## \*155 I. VOLUNTARY DEPARTURE, EXTENSIONS OF VOLUNTARY DEPARTURE, AND EVD DEFINED AND DISTINGUISHED

The concept of EVD is not well-understood. <sup>16</sup> A major cause of the confusion surrounding this relief is the terminology used; even the INS staff apparently has difficulty distinguishing voluntary departure, extensions of voluntary departure, and extended voluntary departure from each other. <sup>17</sup> Although these forms of deportation relief are conceptually related, they have different objectives and effects.

The INA gives the Attorney General discretionary authority to grant voluntary departure status to deportable aliens. <sup>18</sup> The Act permits the Attorney General to grant this status both to aliens already involved in deportation proceedings <sup>19</sup> and to aliens for whom deportation hearings have not yet been held. <sup>20</sup> An alien who voluntarily departs the United States avoids several discommodious legal consequences <sup>21</sup> and, unlike a deported alien, need not obtain special permission to reapply for admission within the next year. <sup>22</sup> Aliens granted this status who do not fall into one of the special categories \*156 discussed below <sup>23</sup> (which allow for 'extensions') must leave the United States within thirty days unless 'meritorious circumstances' are present. <sup>24</sup>

INS regulations permit the granting of extensions of voluntary departure status to certain aliens. <sup>25</sup> For example, an alien who meets the other statutory requirements and 'in whose case the district director has determined there are compelling factors warranting grant of voluntary departure' <sup>26</sup> may be granted an extension of voluntary departure. <sup>27</sup> Other classes of aliens who may receive extensions of voluntary departure status include aliens who have been granted asylum but who have not been granted parole or stay of deportation, <sup>28</sup> certain nonimmigrant aliens who have lost such status solely because of private bills introduced on their behalf, <sup>29</sup> and certain aliens admissible to the United States who meet other conditions as well. <sup>30</sup> The INS officer must generally grant the status in specific increments of time <sup>31</sup> and his or her decision is not subject to administrative appeal. <sup>32</sup>

\*157 No statute or regulation explicitly sanctions the granting of 'blanket' extended voluntary departure (EVD) to all nationals of a specific country. Rather, the privilege has evolved through INS practice since 1960, when the INS conferred EVD status upon Cubans. <sup>33</sup> EVD differs from extensions of voluntary departure in two significant respects: (1) EVD is granted to aliens who are temporarily unable to return to their home country because of dangerous conditions there <sup>34</sup> and (2) the determination does not usually involve individual evaluations, but rather applies to all nationals of the country involved who are within the United States. <sup>35</sup> Grants of EVD status permit the United States to extend temporary aid to aliens without requiring it to grant them permanent status. <sup>36</sup> EVD grants also conserve the Attorney \*158 General's enforcement resources since an individual response to each dislocated alien is no longer required. <sup>37</sup> The aliens benefit by being allowed to stay in the United States until conditions in their home country improve <sup>38</sup> even though they may not have met the more stringent requirements for refugee status. <sup>39</sup>

EVD status has been granted to nationals from fifteen countries and today still applies to nationals from five countries. <sup>40</sup> The Attorney \*159 General's procedure for granting this status is simple. Upon receiving a State Department recommendation, <sup>41</sup> the Attorney General \*160 authorizes EVD status for a specific period of time for all aliens affected. The Attorney General usually conveys his decision by a directive either (1) instructing INS officials to consider 'sympathetically' requests for discretionary relief by the affected aliens <sup>42</sup> or (2) instructing INS officials not to begin deportation proceedings against those aliens or, if an alien has already received a deportion order, not to enforce departure. <sup>43</sup>

## II. HOTEL & RESTAURANT EMPLOYEES UNION, LOCAL 25 V. SMITH

Despite the lack of explicit authority for his actions, <sup>44</sup> the Attorney General granted EVD status to various groups of aliens over a \*161 twenty-three-year period beginning in 1960. <sup>45</sup> His actions went unchallenged in the courts <sup>46</sup> until 1983, when *Hotel & Restaurant Employees Union, Local 25 v. Smith* <sup>47</sup> was filed. The case was initiated by a union whose membership consisted primarily of Salvadoran nationals. <sup>48</sup> The impetus for the suit was the adamant refusal of the Attorney General to grant EVD status to Salvadoran nationals despite urgings by Congress <sup>49</sup> and the public <sup>50</sup> to do so. <sup>51</sup> The plaintiff \*162 claimed that 'the denial by the INS of extended voluntary departure to Salvadorans was arbitrary and capricious, violative of

the Fifth Amendment, and contrary to the rule-making procedures of 5 U.S.C. § 553.<sup>52</sup> The defendants filed motions to dismiss, arguing that (1) the plaintiff lacked standing to sue, (2) the decision to grant or deny EVD was nonjusticiable as a political question, and (3) the complaint did not state a claim upon which relief could be granted. The court rejected each of these motions and ordered the case to proceed either to motions for summary judgment or to trial. The court rejected each of these motions and ordered the case to proceed either to motions for summary judgment or to trial.

The defendants prevailed on their subsequent motion for summary judgment. <sup>55</sup> In its second *Employees Union* opinion, the court characterized \*163 EVD as an exercise of prosecutorial discretion <sup>56</sup> and found that it was not subject to judicial review under the provisions of the APA. <sup>57</sup> Therefore, in the court's view, the plaintiff had no grounds for claiming relief.

As the first judicial pronouncement on EVD, *Employees Union* is an important indication of how this status is viewed in the judiciary. The court interpreted grants of EVD as responses to foreign and domestic policy considerations, <sup>58</sup> rather than as manifestations of humanitarian concern for the safety and well-being of the aliens involved. The court found both constitutional <sup>59</sup> and statutory <sup>60</sup> bases for the Attorney General's power to grant EVD, despite the clear extrastatutory nature of EVD status. <sup>61</sup>

The court began by stating that '[t]he Constitutional foundation \*164 for grants of EVD derives from the Executive's express and inherent authority in the areas of both foreign and prosecutorial policy.' 62 The court noted that the 'regulation of aliens' was "intricately interwoven" with the plenary power over foreign affairs constitutionally vested in the Executive branch. 63 Moreover, regulation over immigration is 'an 'inherent executive power." 64 Thus, in the court's eyes, the Attorney General was constitutionally authorized to execute foreign policy by granting this status to aliens.

The court then noted that under the Constitution, discretionary matters, including those in the immigration area, are governed by 'the plenary, if not exclusive authority' of the executive branch. <sup>65</sup> The decision to deport (or not to deport) is a matter of 'prosecutorial discretion' <sup>66</sup> and, as the Supreme Court has noted, the constitutional authority to exercise such discretion reaches its zenith in the area of immigration law. <sup>67</sup>

Finally, the *Employees Union* court found a statutory basis for grants of EVD in the INA, which authorizes the Attorney General to 'establish such regulations . . . and perform such other acts as he deems necessary for carrying out [the administration and enforcement of the Act].' 68 Since, in the court's view, grants of EVD were "rationally related" 69 to the duties imposed upon the Attorney General by the Act, his exercise of discretion in this area was valid, even though EVD is neither statutorily condoned or mandated. 70

\*165 Having located the source of the Attorney General's power to grant EVD status, the court went on to state that two provisions of the APA prevented judicial review of the Attorney General's decision to deny this relief to Salvadoran nationals. 71 First, the APA subjects to review only 'a gency action made reviewable by statute a final agency action for which there is no other adequate remedy in a court . . .. '72 Since EVD is not made reviewable by statute and since aliens denied this status retain the full panoply of procedures and appeals available in deportation proceedings, the *Employees Union* court found that the APA precluded judicial review. 73

Second, the APA also prohibits judicial review of agency action 'committed to agency discretion by law.' <sup>74</sup> This provision applies where "statutes are drawn in such broad terms that in a given case there is no law to apply." <sup>75</sup> The court found that, because of EVD's extrastatutory nature, there was 'indeed 'no law to apply." <sup>76</sup>

The court thus concluded that EVD was simply not the type of agency action in which courts should interfere. <sup>77</sup> It emphasized that because EVD involves prosecutorial discretion, which is necessarily broad, <sup>78</sup> and because immigration is intertwined with the conduct of foreign affairs, an area in which the courts are loath to intervene, <sup>79</sup> the Attorney General's decision could be subject to no more than limited review for abuse of discretion. <sup>80</sup> The court went on to find that even \*166 this narrow review was unavailable, noting that a court can review for abuse of discretion only where a standard exists by which to gauge the

executive's action. <sup>81</sup> The *Employees Union* court found that no such standard exists for EVD, rejecting plaintiff's argument that a 'humanitarian' standard had evolved as a result of the pattern of past EVD grants by the Attorney General. <sup>82</sup> Therefore, the court found that the Attorney General's decision not to grant EVD status to Salvadoran nationals was not subject to judicial review. <sup>83</sup>

The *Employees Union* court's analysis of the scope of judicial review available to EVD claims is consistent with the teachings of the past century of immigration law. <sup>84</sup> As the next Part discusses, however, immigration law is undergoing a gradual transformation. Determination of the scope of judicial review available in cases such as *Employees Union* depends at least in part upon how the American legal system views the status of aliens. In dismissing EVD as an unreviewable exercise of prosecutorial discretion, the *Employees Union* court embraced the traditional conception of immigration law, which emphasizes the limited rights of aliens and affords extreme judicial deference to the legislative and executive branches in immigration matters. <sup>85</sup> This view is ultimately unsatisfying because it ignores both the substantive nature of EVD and the impact of the Attorney General's decision on aliens such as the Salvadorans. The nascent concept of 'communitarianism,' <sup>86</sup> on the other hand, suggests a more sensitive way of analyzing the competing interests involved in EVD claims.

#### III. THE EVOLUTION OF IMMIGRATION LAW

Immigration law has long occupied a unique place in American jurisprudence. Despite the transformations wrought by increased judicial \*167 activism and the expansion of constitutional protections in other areas of law in recent decades, immigration law has remained surprisingly untouched. <sup>87</sup> The 'insularity' of immigration law has, however, come under increasing attack by legal scholars. <sup>88</sup> As a result, immigration law is slowly changing as perceptions of aliens and thier relationship to American society change. This evolution has important implications for the nature of EVD and the procedural safeguards due it.

## A. The Development of American Immigration Policy

The evolution of American immigration policy is closely tied to the changing social, economic, and political milieus of the country. Professor Schuck has identified three stages in the development of American immigration policy. <sup>89</sup> From the beginning of the Republic to the 1880s, a 'liberal ideology,' which recognized the 'moral worth and dignity' of the individual and his right to a role in society, resulted in an immigration policy that actively recruited mass immigration. <sup>90</sup>

As the United States ceased being a land of endless frontiers and \*168 limitless growth and developed instead into an urban and industrial society with more restricted growth, liberal ideology faded. Fundamental economic, political, and social changes gave birth to a new ideology of 'restrictive nationalism,' which manifested itself in a legal order Schuck terms 'classical immigration law.' 1 Exclusionary reactions to immigrants 2 resulted in an ideology which altered the source of aliens' rights and duties. Under liberal ideology, an alien's rights and duties were seen to stem from his or her right to freely contract with others. Under restrictive nationalism, however, the alien's legal status was defined by 'the national government's consent to allow the alien to enter and remain, which consent could be denied or withdrawn on the basis of arbitrary criteria and summary procedures that often transgressed liberal principles.' 3

Not surprisingly, the first pronouncements of judicial restraint in the immigration area came in the early years of classical immigration law. The Supreme Court recognized early the plenary power of Congress in the immigration field <sup>94</sup> and made sweeping denials of its own power to control the legislature's actions. <sup>95</sup> The result is an exaggerated \*169 judicial deference to laws governing the admission, exclusion, and deportation of aliens which persists to the present. <sup>96</sup>

The restrictive tide of classical immigration law has only recently shown signs of receding. Professor Schuck has identified an emerging ideological shift in immigration law, in which the focus is not on the government's omnipotent sovereignty, but rather on the 'essential and equal humanity' of individuals. <sup>97</sup> Under this 'communitarian' vision of immigration law, the government's duties extend 'to all individuals who manage to reach America's shores, even to strangers whom it has never undertaken, and has no wish, to protect. <sup>98</sup> Communitarianism reaches back to liberal ideology to find that all individuals possess certain universal rights simply because they are human beings. This new view emphasizes the 'social interactions and

commitments' between \*170 aliens and the government as the source of the government's duty toward those aliens, rather than governmental consent. 99

Communitarianism is by no means an established approach to immigration law. <sup>100</sup> Yet the pressures for change <sup>101</sup> are mounting, and the first faint flickerings of this new ideology are apparent. <sup>102</sup> Thus, we see decisions that imply that long-term resident aliens are members of our national community and thus entitled to various rights, <sup>103</sup> decisions evidencing increased judicial assertiveness, <sup>104</sup> and decisions creating increased procedural and substantive rights for deportable and detained aliens. <sup>105</sup>

\*171 The increased infusion of moral values into law that necessarily accompanies communitarianism has important procedural implications. <sup>106</sup> Traditionally, aliens were perceived as having few or no procedural rights. <sup>107</sup> If we admit that aliens are entitled to some procedural protection, however—either by virtue of their ties to the United States <sup>108</sup> or simply because of their basic humanity—we are forced to consider competing interests: the alien's interest in avoiding arbitrary government decisionmaking <sup>109</sup> versus the government's interest in avoiding fiscal and administrative burdens <sup>110</sup> and in preventing the entry of aliens not entitled to the benefits of our society. <sup>111</sup> EVD presents a revealing opportunity to consider these individual and governmental concerns in the context of discretionary decisionmaking by the Attorney General.

## B. The Application of Communitarianism to EVD

In denying judicial review in *Employees Union*, the court adopted the classical view of immigration law. EVD, like most forms of discretionary relief, has no procedural safeguards provided by statute or regulation. <sup>112</sup> Moreover, discretionary decisions to suspend enforcement of the deportation laws have traditionally been considered nonreviewable exercises of prosecutorial discretion. <sup>113</sup> In effect, the *Employees Union* court weighed the interests of the two parties involved and found the scales grossly lopsided. On one side, it had an exercise of prosecutorial discretion by the Attorney General involving immigration and, impliedly, foreign affairs—interests traditionally subject to extremely narrow review. On the other side, it had a demand for judicial review by a group traditionally deemed to have only those limited rights the government chooses to grant it.

An examination of EVD through the lens of the communitarianism \*172 view of immigration law, however, reveals that the Salvadoran nationals have important interests at stake that can be protected only by judicial review. Salvadoran nationals, though present illegally in the United States, have a very strong interest in not being returned to the dangers of their homeland. <sup>114</sup> That interest should not be disregarded and, at the very least, entitles the Salvadorans to procedural fairness. Though few would argue that these aliens have an incontrovertible right to remain in the United States, the judicial deference traditionally accorded immigration law seems misplaced in this instance. If we examine the nature of EVD grants more critically, we see that *Employees Union* involved precisely the sort of governmental action which should be subject to judicial review.

#### IV. THE SOURCE OF EVD

An examination of the source of the Attorney General's power to grant EVD status reveals that this relief is not merely a gratuitous decision not to enforce the immigration laws, but rather an affirmative action conferring special benefits on the aliens involved. Thus, the *Employees Union* court's characterization of EVD as 'prosecutorial discretion' is conclusory; application of such a label enables the court to avoid examining the underlying reasons for the Attorney General's decision and to ignore the substantive impacts of this status on the aliens who receive it. <sup>115</sup>

## A. EVD as Prosecutorial Discretion

The *Employees Union* court's characterization of EVD as an exercise of prosecutorial discretion is accurate in one sense. The INS has neither the fiscal nor the administrative resources to initiate deportation hearings against every illegal alien it finds in the United States. <sup>116</sup> Thus, the INS exercises prosecutorial discretion in deciding which aliens will be excused from deportation proceedings and in setting the terms and duration of their stay. <sup>117</sup> This discretion has become more focused as the INS has

created specific forms of discretionary deportation relief and has promulgated standards for granting that relief. <sup>118</sup> It \*173 is misleading, however, to analogize too closely these forms of discretionary relief to the most common form of prosecutorial discretion—that which arises in the criminal context.

The judiciary has generally accorded great deference to exercises of prosecutorial discretion in the criminal setting. <sup>119</sup> Courts assume that a prosecutor's resources are so limited that he or she cannot prosecute all offenders <sup>120</sup> and that, in any event, leniency is warranted in some cases. <sup>121</sup> A number of other factors may influence the prosecutor's decision to charge, including uncertainty about the defendant's guilt, <sup>122</sup> the perceived likelihood of conviction, <sup>123</sup> and the potential for deterrence of others. <sup>124</sup> Because the courts consider these matters to be exclusively within the prosecutor's discretion, his or her decision is virtually unreviewable. <sup>125</sup>

An agency's determination to enforce or not 'involves a complicated balancing of a number of factors' <sup>126</sup> similar to those found in the criminal setting:

[T]he agency must not only assess whether a violation has occurred, but whether agency resources are best spent on this violation or another, whether the agency is likely to succeed if it acts, whether the particular enforcement action requested best fits the agency's overall policies, and indeed, whether the agency has enough resources to undertake the action \*174 at all. 127

Likewise, agency exercises of prosecutorial discretion are subject to very limited review for abuse of discretion. 128

The analogy between prosecutorial discretion in the criminal context and prosecutorial discretion in the agency context collapses upon close examination, however. The two settings give rise to exercises of discretion which are fundamentally different. An exercise of prosecutorial discretion in a criminal setting is directed toward past behavior; the act has already occurred and only the societal interest in punishing the guilty remains. <sup>129</sup> Exercises of prosecutorial discretion in the agency setting, on the other hand, can be proactive, not merely reactive, in effect. <sup>130</sup> As Justice Marshall noted, 't he interests at stake in review of administrative enforcement decisions are . . . more focused and in many circumstances more pressing than those at stake in criminal prosecutorial decisions.' <sup>131</sup>

The Attorney General's decision to grant or deny EVD status well exemplifies this phenomenon. A decision to forego prosecution in a criminal case preserves the status quo; the potential defendant, who is presumed innocent until proven guilty, remains innocent. <sup>132</sup> A grant of EVD, on the other hand, is not merely a decision 'to suspend enforcement \*175 of the immigration laws,' <sup>133</sup> but rather is an affirmative action conferring important legal privileges on the aliens involved. All aliens in the relevant class, regardless of their legal status, are entitled to remain in the United States while the grant remains in effect and are eligible to receive work authorization from the INS during their stay. <sup>134</sup> Although the aliens are technically deportable, a grant of EVD allows them to conduct their affairs in any manner they choose as long as they remain in the United States. <sup>135</sup> Recipients of EVD thus acquire significant advantages which belie the notion that they are merely passive beneficiaries of the Attorney General's discretionary decision to eschew prosecution.

The *Employees Union* court's failure to investigate fully the nature of EVD did a grave disservice to the Salvadoran nationals by allowing the Attorney General to hide behind the cloak of prosecutorial discretion. \*176 Though most forms of deportation relief are properly termed 'prosecutorial discretion,' <sup>136</sup> this term does not mean that the actions are automatically immune from judicial review. Despite the judiciary's general reluctance to review discretionary decisions, <sup>137</sup> the courts will intervene in cases of 'clear abuse of discretion.' <sup>138</sup> To determine the scope of judicial review that should be applied to EVD decisions, it is necessary to identify the underlying statutory authority for the grants.

## B. The Statutory Source of EVD

The Attorney General's authority to grant EVD has never been challenged; therefore, the source of this power has never been fully examined. Closer scrutiny reveals that EVD is actually a group application of another form of administratively-provided deportation relief—extensions of voluntary departure.

EVD, like all other variations of voluntary departure, originates in the INA provisions which empower the Attorney General with discretionary authority to grant voluntary departure. <sup>139</sup> The Act sets basic eligibility requirements which the alien must meet before he or she will be considered for this relief. <sup>140</sup> Award of the status to eligible aliens is solely within the discretion of the immigration authorities. 141

In addition to this 'routine' type of voluntary departure, <sup>142</sup> the INS has created extensions of voluntary departure. <sup>143</sup> As mentioned in Part I, this relief is granted in a number of situations, <sup>144</sup> including cases where deportation of the alien would result in excessive hardship. 145 Although the regulations are vague, 146 the Operations Instructions indicate that aliens who are temporarily unable 'to return to their home country because of civil war or catastrophic circumstances there', 147 may receive a one-year extension of voluntary departure \*177 and employment authorization.

The Attorney General has delegated his authority to grant these various types of voluntary departure to certain INS officials. <sup>148</sup> Their determinations are made on an individual basis and, like grants of voluntary departure, involve a two-step process. The official must first determine whether the alien meets the preliminary standards for eligibility set forth in the statute and regulations. Once the alien has been found to meet the criteria for consideration, the official then has discretion to grant him or her relief. 149

EVD is nothing more than an en masse grant of extensions of voluntary departure made by the Attorney General, rather than by his subordinates. Although the wording of the statutory authority for voluntary departure seems to contemplate individual <sup>150</sup> rather than en masse determinations, the Attorney General is entitled to make blanket grants as well. <sup>151</sup> What the Attorney General is *not* entitled to do is to alter the parameters of his discretion at will and without adequate explanation.

Although the Attorney General has never formulated any standards regarding his exercise of discretion in this area, he has nonetheless created a de facto standard through his past grants of EVD. Past grants of this status have always been accompanied by explanations of the 'humanitarian' reasons militating for such status. <sup>152</sup> The criteria \*178 used in granting this status have effectively defined the class to which the Attorney General may, in his discretion, extend EVD. 153

\*179 In denying EVD to Salvadorans, however, the Attorney General has attempted to redefine the class. Foreign and domestic policy concerns, \*180 as well as other, less well-articulated considerations, formed the basis of the decision to deny EVD status to the Salvadorans. <sup>154</sup> The *Employees Union* court found that, because the Attorney General was exercising his discretion, his decision to shift the parameters of the class eligible for EVD status was one that necessarily was not subject to judicial review. 155

Although discretionary actions, particularly those taken by the immigration authorities, are subject to limited review, they are not entirely precluded from judicial review. As has often been noted, '[d]iscretion does not mean license.' 156 Agency action which abuses the discretion granted to it by Congress is impermissible. In failing to examine the Attorney General's decision for abuse of discretion, the Employees Union court ignored the significant interest of the Salvadorans in ensuring that their status be determined fairly.

#### V. REVIEWING EVD DETERMINATIONS UNDER THE APA

The Employees Union court stated that the APA precluded it from reviewing EVD determinations. Yet the provisions it cited do not necessarily foreclose judicial scrutiny of the Attorney General's actions. First, the court claimed that since the protections of the deportation process were still available to aliens denied EVD, judicial review was unavailable because EVD was not a 'final

agency action.' <sup>157</sup> The APA's requirement that final agency action be taken before judicial review is available 'is designed to avoid premature judicial involvement in the agency decision making process.' <sup>158</sup> In addition to satisfying the pragmatic concern of providing the court with a sufficient basis for judicial review, <sup>159</sup> the requirement also ensures the agency ample opportunity to exercise the decisionmaking authority the legislature granted it.

EVD does not present these jurisprudential concerns. If the Attorney General denies certain aliens EVD status based on impermissible grounds, he has taken a final action for which there is no other adequate remedy. <sup>160</sup> The use of inappropriate criteria in the EVD determination \*181 will deny the aliens access to a valuable status despite the availability of other types of individualized deportation relief. <sup>161</sup>

The *Employees Union* court also found that the APA precluded judicial review of the Attorney General's decision to deny EVD to Salvadorans because EVD was an extrastatutory status and thus presented no standard for review. <sup>162</sup> In so holding, however, the court ignored the standard set by the Attorney General himself through his past grants of EVD. The court should have reviewed his determination to see if it departed from his past practices in such a way as to constitute an abuse of discretion.

The APA divides all administrative actions into three categories: quasi-judicial adjudication, quasi-legislative rulemaking, and a residual category—'informal action.' <sup>163</sup> While the APA outlines specific procedural rules and standards of judicial review for rulemaking and adjudication, <sup>164</sup> no such standards are provided for informal agency action. Thus, discretionary actions, which fall into this residuum, are typically reviewed for 'abuse of discretion' in accordance with the APA's 'catchall' provision. <sup>165</sup>

\*182 The judicial review provided for discretionary actions is extremely narrow. A court 'can interfere only when there has been a clear abuse of discretion or a clear failure to exercise discretion.' <sup>166</sup> The courts reason that where Congress has entrusted an administrator or agency with discretionary authority, the judiciary will not substitute its judgment for that of the administrator. <sup>167</sup> Nonetheless, a court can intervene to correct actions it considers 'manifestly illegal, unfair, or unjust.' <sup>168</sup>

Although the APA does not define 'abuse of discretion,' courts have developed standards for this type of judicial review. In Wong Wing Hang v. INS, <sup>169</sup> Judge Friendly defined abuse of discretion as an action 'made without a rational explanation, inexplicably departed from established policies, or rested on an impermissible basis such as an invidious discrimination against a particular race or group, or . . . on other 'considerations that Congress could not have intended to make relevant." <sup>170</sup> The courts have established that an agency must either follow its own precedents or explain why it departs from them: <sup>171</sup> 'A n agency changing its course must supply a reasoned \*183 analysis indicating that prior policies and standards are being deliberately changed, not casually ignored, and if an agency glosses over or swerves from prior precedents without discussion it may cross the line from the tolerably terse to the intolerably mute.' <sup>172</sup> Thus, actions by the Attorney General that violate standards of fairness and rationality abuse the discretion granted him by Congress.

The *Employees Union* court, therefore, should have reviewed the Attorney General's decision to see (1) whether the determination to deny EVD status to Salvadoran nationals represented a change in policy, and (2) if the Attorney General did alter his policy, whether his alteration had a rational explanation. The court never got to the first inquiry, however. Although the Attorney General had always espoused humanitarian concerns when granting EVD in the past, <sup>173</sup> the *Employees Union* court declined to find that these prior practices had established a 'humanitarian' standard, fearing that such a standard would 'open up irresponsibly the floodgates to illegal aliens' in disregard of immigration and foreign policy considerations. <sup>174</sup>

The *Employees Union* court's fear that a humanitarian standard would deprive the Attorney General of the ability to make necessary distinctions in the immigration area is unfounded. The court erroneously assumed that finding a humanitarian standard in past grants of EVD would mandate the granting of the status to all future aliens who fell within this category. But, as described earlier, most forms of discretionary immigration relief involve a two-step process.<sup>175</sup> The immigration official must first determine whether the alien meets the statutory or administrative requirements for relief. Only if the answer \*184 is in the affirmative does the official go on to decide whether he or she will exercise his or her discretion favorably.

Thus, making the Attorney General exercise his discretion in conformance with his past practices does not necessarily provide automatic entrance into the United States for all aliens whose countries are undergoing some sort of turmoil. The standard does not create an entitlement to the status; rather, it ensures that similarly situated aliens will have their eligibility for the status evaluated according to the same criteria. Moreover, reviewing the Attorney General's decision for abuse of discretion in this way would not create an inexorable eligibility standard which would shackle his discretion and eliminate the flexibility he needs to deal with unanticipated situations. Departures from existing precedents are permissible when they are accompanied by a rational explanation. <sup>177</sup> If factors necessitate a change in policy, the Attorney General can easily accommodate them.

Subjecting the Attorney General's decision to deny EVD to Salvadoran nationals to judicial review runs counter to the teachings of classical immigration law. However, if we look at the competing interests at stake, we see that the scales lean heavily toward affording the aliens some administrative process. <sup>178</sup> The aliens involved here have an interest in receiving accurate, nonarbitrary decisionmaking. Although the relief they seek is discretionary and they have no absolute right to that relief, these aliens deserve to receive a procedure equivalent to that afforded other similarly situated aliens. <sup>179</sup>

Of course, the aliens' interest in receiving consistent, fair determinations competes with that of the government in adopting procedures which ensure fiscal and administrative efficiency, <sup>180</sup> speed, and accuracy. <sup>181</sup> \*185 Because of these governmental interests, the courts are hesitant to require any agency, including the INS, to create standards or to make rules. <sup>182</sup> Yet EVD graphically illustrates the dangers inherent in such a deferential approach. The Attorney General has never articulated standards for grants of EVD; indeed, he has never formalized the status in any way. Allowing the Attorney General to exercise unfettered discretion in this area simply because he chooses not to circumscribe his discretion creates a reductio ad absurdum: the Attorney General has unlimited discretion because he has stated that he has unlimited discretion. If there are no standards, formal or otherwise, guiding his discretion and no judicial review is available, the Attorney General in effect has unchecked power to allow any groups of aliens he selects to stay in the United States for indeterminate periods. The potential for abuse through discriminatory decisions or decisions based on factors not contemplated by Congress when it drafted the INA—is great.

The INS has long been criticized for its deficiency in articulating standards to constrain and guide its discretion. <sup>183</sup> Although not all types of administrative discretion need to be checked, <sup>184</sup> EVD is precisely the type of status that requires such limitations. Unless the Attorney General sets standards for the granting of EVD status, the public has no means of evaluating his decisions or of determining whether he is acting in a discriminatory manner. The result is a decision that is not perceived as fair or legitimate, either by the public or by the aliens involved.

Making the Attorney General publicly articulate the reasons for his modification or exception would provide legitimacy for that decision. First, a 'reasons requirement' would force the Attorney General to consider his decision more carefully, and force him to confront his own motives for modifying the standards for relief. <sup>185</sup> Second, it would increase his sense of accountability by forcing him to bear the full political costs of his decision. Such a requirement would place a burden on the Attorney General only where his policy change is based on impermissible grounds. <sup>186</sup>

\*186 Requiring the Attorney General to state his reasons for departing from his standard would also yield important safeguards for the aliens involved. First, it would provide a basis for judicial review to ensure that the departure was not an abuse of discretion. <sup>187</sup> Second, an open record of past criteria would help ensure that similarly situated aliens would be able to obtain equivalent treatment in the future. 188

Aliens, like all other participants in our society, have a fundamental interest in being free from arbitrary governmental action. <sup>189</sup> When standards are not present, the affected aliens have no idea what type of proof they should marshal to support their requests for relief, <sup>190</sup> nor do they have any way of gauging whether their applications were treated fairly. The end result is increased costs, both for the eligible aliens, who may have been discriminated against, and for the INS, which faces potentially stricter judicial scrutiny as a result of its lack of standards. <sup>191</sup>

## VI. COMMUNITARIANISM REVISITED

How, then, is judicial review of EVD decisions consistent with the current infusion of communitarian standards in immigration law? As noted earlier, <sup>192</sup> immigration law presents an opportunity for 'administrative abuse and lawlessness' unparalleled in other areas of public law. 193 The Employees Union court's decision that EVD is an unreviewable exercise of prosecutorial discretion illustrates the potential dangers caused by unwarranted judicial deference. In effect, the court said that the Attorney General was free to create a form of deportation relief not sanctioned by the INA and that he could, by virtue of his own refusal to articulate standards or other criteria, grant or deny that status unhindered by any legal constraints.

\*187 Such unbridled discretion may be countenanced by those embracing the traditional restrictive view of immigration law. But in view of the essential life and liberty interests at stake in EVD decisions, anyone who admits the fundamental humanity of aliens must be offended by the notion that the Attorney General has boundless discretion to bestow such an important status in any manner he wishes.

Increased judicial assertiveness in this area is necessary to preserve the integrity of immigration law. The solution is not to surround EVD with inflexible constitutional requirements. <sup>194</sup> Rather, the courts should require the Attorney General to state clearly his criteria for determining EVD eligibility and should demand rational explanations for any deviations from the stated policy. <sup>195</sup> Determinations as to which aliens will receive EVD status must ultimately rest with the Attorney General. The courts nonetheless should play an active role in ensuring that the procedures by which those determinations are made are perceived as accurate, fair, and legitimate, both by the aliens affected and by the public as a whole.

#### CONCLUSION

Requiring the Attorney General to apply an administratively fair procedure to his EVD eligibility determinations will enhance the perceived legitimacy of his actions and will force him to bear the full public costs of his actions—both undeniably important interests. In the end, however, aliens such as the Salvadorans will gain little practical benefit from such a requirement. The Attorney General will still have the discretionary power to deny them the relief they seek even though they qualify for the status —he will just have to do it in a procedurally fair way.

Many have urged that Congress enact special legislation granting EVD status to Salvadorans. <sup>196</sup> While such a suggestion would solve the dilemma that these particular aliens currently face, it would do nothing for future aliens who find themselves in a similar situation. Rather, comprehensive new legislation is needed to combat the problems now associated with EVD.

First, EVD should be renamed to alleviate the confusion now associated with the name. <sup>197</sup> 'Temporary safe haven' has been suggested \*188 by many, since this term 'highlight's the temporary nature of the program and its humanitarian intent.' 198 More than just cosmetic changes are needed, however. Congress should specifically grant the Attorney General the power to grant this status, thus removing any doubts as to either the legitimacy or the source of his authority. <sup>199</sup> The humanitarian objective of the status should be made clear, and perhaps its scope should be broadened to include aliens whose countries are experiencing natural catastrophes, not just political upheaval. 200 It would be undesirable and impractical to set concrete legislative standards for determining when EVD status should be granted. The United States cannot possibly grant relief to nationals from every country undergoing civil unrest. Congress can, however, by articulating guidelines and by requiring the Attorney General to issue findings along with his determination, curtail the likelihood of EVD being reduced to a mere foreign policy tool in the hands of the executive branch. Finally, the procedures governing grants of EVD should be standardized. A cut-off date should be assigned to each grant to deter further illegal emigration from that country, <sup>201</sup> and INS \*189 officials should be well-informed as to the Attorney General's decisions. <sup>202</sup>

EVD will always carry political overtones simply because it is impossible for the United States to grant EVD status to all of the multitude of aliens whose countries are experiencing political or other internal disruptions. But even though the United States cannot grant relief to all, it can ensure that its decisions are fair and evenhanded. Only open acknowledgement of the standards for this relief can preserve its integrity, for '[s]ecret law . . . has no place in any decent system of justice.' 203

## **AUTHOR'S POSTSCRIPT**

As this Note was going to press, the Court of Appeals for the District of Columbia Circuit handed down its decision in the Employees Union appeal. 204 The appellate court, like the lower court, applied the traditional view of immigration law, finding that 'EVD is an extra-statutory remedy and that the decision to award or to withhold it for citizens of a particular nation lies squarely within the discretion of the Attorney General. The court of appeals agreed with the district court that the APA precluded judicial review of EVD determinations, noting that such determinations were neither made reviewable by statute nor were final agency actions for which there was no other adequate judicial remedy. <sup>206</sup> The appellate court also declined to find that EVD grants were controlled by a 'humanitarian' standard, fearing that imposition of such a standard would 'impermissibly curtail' the exercise of the Attorney General's discretion. <sup>207</sup> Although the court \*190 acknowledged that 'an agency may not arbitrarily grant or withhold statutorily created and defined remedies, <sup>208</sup> it found that 'a n agency's exercise of inherent, extra-statutory discretion . . . is quite another matter. Thus, the court of appeals, like the district court, refused to limit the Attorney General's discretion, or even to require him to articulate his standards for granting EVD status.

#### **Footnotes**

- Government figures vary on this point. According to H.R. REP. NO. 1142, 98th Cong., 2d Sess., pt. 1, at 54 (1984), blanket extended voluntary departure (EVD) has been granted to nationals from Cuba, the Dominican Republic, Czechoslovakia, Chile, Cambodia, Vietnam, Laos, Lebanon, Ethiopia, Uganda, Iran, Nicaragua, Afghanistan, and Poland. The Immigration and Naturalization Service (INS) excludes the Dominican Republic from the list, but adds Hungary and Rumania. Immigration and Naturalization Service, U.S. Dept. of Justice, Asylum Adjudications: An Evolving Concept and Responsibility for the Immigration and Naturalization Service 67-68 (June and Dec. 1982) (mimeo) [hereinafter INS, Asylum Adjudications] (copy on file at Michigan Law Review). See note 40 infra. Gordon and Rosenfield state that extended voluntary departure was also granted to Yugoslavians, but they provide no documentation for this inclusion. 1A C. GORDON & H. ROSENFIELD, IMMIGRATION LAW AND PROCEDURE § 5.3e(6a) (1981).
- 2 Case-by-case extensions of voluntary departure, see notes 25-32 infra and accompanying text, under 8 C.F.R. § 242.5(a) (3) (1986), see note 24 infra, are sometimes referred to as 'extended voluntary departure.' See, e.g., Bolanos v. Kiley, 509 F.2d 1023, 1026 (2d Cir. 1975); United States ex rel. Bartsch v. Watkins, 175 F.2d 245, 247 (2d Cir. 1949); Akbari v. Godshall, 524 F. Supp. 635, 644 (D. Colo. 1981); 2 C. GORDON & H. ROSENFIELD, supra note 1, § 7.2a. En masse grants of indefinite voluntary departure are also referred to as 'extended voluntary departure.' See, e.g., Hotel & Restaurant Employees Union, Local 25 v. Smith, 594 F. Supp. 502, 505 (D.D.C. 1984), affd. in part, revd. in part, 804 F.2d 1256 (D.C. Cir. 1986); 1A C. GORDON & H. ROSENFIELD, supra note 1, § 5.3e(6a); INS, Asylum Adjudications, *supra* note 1, at 65. This Note uses EVD to refer only to this latter type of relief.
- 3 See note 152 infra. The INS describes EVD status as follows: Nationals from many countries visit, study, or do business in the United States regularly. From time to time unexpected crises—war, political upheaval, etc.—occur in the home country which could jeopardize the lives of visitors in the United States if they returned during the crises. In such situations, acting on specific State Department recommendation, the Attorney General has permitted foreign nationals in the United States to remain until conditions in their home country stabilize. Usually the State Department cites civil war, invasion by foreign nationals, etc., as precipitating factors in its recommendations to the Justice Department. The Attorney General then authorizes extended voluntary departure status for a specified period for nationals of the requisite country.
  - The status is a temporary one, granted for varying periods, reviewed and then extended or terminated at the end of that time. The action is a blanket determination, that is, all nationals of a particular country who are in the United States are covered.
  - INS, Asylum Adjudications, *supra* note 1, at 65.
- 4 See note 152 infra and accompanying text; see also 1A C. GORDON & H. ROSENFIELD, supra note 1, § 5.3e(6a) (describing EVD as 'temporary sanctuary'). But see note 153 infra (government has asserted that EVD is granted for other reasons).
- 5 This lack of public notice is exemplified by the dearth of published material on the subject. See generally T. A. ALEINIKOFF & D. MARTIN, IMMIGRATION: PROCESS AND POLICY 726-43 (1985) (presentation of general

EVD concept and study of proposed use of EVD for Salvadoran aliens); 1A C. GORDON & H. ROSENFIELD, supra note 1, § 5.3e(6a) (one-page summary of EVD concept in an eight-volume treatise on immigration law); A. LEIBOWITZ, IMMIGRATION LAW AND REFUGEE POLICY § 5.05, at 5-156 to 5-160 (1983) (one page synopsis with reproductions of two news articles on specific instances where EVD was granted); Note, Salvadoran Illegal Aliens: A Struggle to Obtain Refuge in the United States, 47 U. PITT. L. REV. 295, 309-33 (1985) (historical look at the issue and discussion of the potential for extending EVD to Salvadorans). The denial of EVD status to Salvadorans did cause a flurry of articles in the press. See note 8 infra.

- See Hotel & Restaurant Employees Union, Local 25 v. Smith, 563 F. Supp. 157, 159 (D.D.C. 1983), motion for summary judgment granted, 594 F. Supp. 502 (D.D.C. 1984) ('Plaintiff seeks to challenge . . . the failure of the Attorney General and the Immigration and Naturalization Service (INS) to grant [Salvadorans] extended voluntary departure.'); Letter from William F. Smith, Attorney General, to Representative Lawrence J. Smith (July 19, 1983), reprinted in Memorandum of Points and Authorities in Support of Defendants' Motion for Partial Summary Judgment at Exhibit D, Hotel & Restaurant Employees Union, Local 25 v. Smith, 563 F. Supp. 157 (D.D.C. 1983) (No. 82-2203) [hereinafter Defendants' Memorandum] ('I have concluded that the present circumstances do not warrant a granting of 'extended voluntary departure' to El Salvadorans presently in the United States illegally.').
- The Department of State's 1984 Country Report on El Salvador states: Human rights conditions in El Salvador are strongly affected by the ongoing civil strife. The achievement of a stable public order sufficient to protect individual rights has been disrupted by guerrilla and military operations, partisan hatreds, acts of revenge, fear, and a prevailing uncertainty characterized by violence. This situation contributes to, and is complicated by, the ineffective operation of the judicial system, caused in part by corruption and intimidation. DEPT. OF STATE, 99TH CONG., 1ST SESS., COUNTRY REPORTS ON HUMAN RIGHTS PRACTICES FOR 1984, at 512-13 (Joint Comm. Print 1985). Authorities agree that over 40,000 noncombatants have been killed in El Salvador over the last five years. See, e.g., Extended Voluntary Departure Issues: Hearings on § 377 Before the Subcomm. on Immigration Refugee Policy of the Senate Comm. on the Judiciary, 99th Cong., 1st Sess. 111 (1985); Temporary Suspension of Deportation of Certain Aliens, 1984: Hearing on H.R. 4447 Before the Subcomm. on Immigration, Refugees, and International Law, 98th Cong., 2d Sess. 29-30 (1984) [hereinafter Hearing on H.R. 4447]. See generally Note, The Agony and the Exodus: Deporting Salvadorans in Violation of the Fourth Geneva Convention, 18 N.Y.U. J. INTL. L. & POLITICS 703, 719-25 (1986) (description of human rights abuses in El Salvador). Reports suggest that Salvadorans forced to return to El Salvador from the United States face even greater dangers than those who never left the country. ACLU, NATIONAL IMMIGRATION AND ALIEN RIGHTS PROJECT, SALVADORANS IN THE UNITED STATES: THE CASE FOR EXTENDED VOLUNTARY DEPARTURE, appendix III (Rpt. No. 1, Dec. 1983).
- See, e.g., Shelter for Refugees, L.A. Times, Apr. 29, 1985, at 4, col. 1; Insensitivity on Refugees, L.A. Times, Feb. 25, 1985, § 2, at 4, col. 1; Salvadorans Rebuffed on Special Immigration Status, Wash. Post, Sept. 27, 1984, at A9, col. 1; It's Wrong to Deport Salvadorans Right Now, N.Y. Times, Aug. 19, 1983, at A20, col. 4; Abrams, Diluting Compassion, N.Y. Times, Aug. 5, 1983, at A23, col. 1; Restaurant Union Challenges Federal Immigration Policy, Wash. Post, June 16, 1983, at A1, col. 1; Why Poles but Not Salvadorans?, N.Y. Times, May 31, 1983, at A20, col. 1; U.S. is Condemned Over Salvadorans, N.Y. Times, May 21, 1983, at A5, col. 1; Deporting Salvadorans, Wash. Post, Apr. 2, 1983, at A14, col. 1; Salvadorans Forced Back into 'Hell,' N.Y. Times, Mar. 3, 1983, at A26, col. 5.
- 563 F. Supp. 157 (D.D.C. 1983), motion for summary judgment granted, 594 F. Supp. 502 (D.D.C. 1984), affd. in part, revd. in part, 804 F.2d 1256 (D.C. Cir. 1986). The court noted that 'the issue presented . . ., that of judicial review of the Attorney General's determination regarding a grant of EVD, is one of first impression in the Courts.'
  594 F. Supp. at 505. [As this Note was going to press, the Court of Appeals for the District of Columbia Circuit affirmed the district court's grant of summary judgment to the defendants on the EVD issue in the Employees Union case. See Author's Postscript, notes 204-09 infra and accompanying text.—Ed.]
- 10 594 F. Supp. at 504.
- 11 594 F. Supp. at 508.

- 12 See notes 91-96 infra and accompanying text.
- 13 See notes 97-105 infra and accompanying text.
- 14 8 U.S.C. §§ 1101-1503 (1982).
- 15 Administrative Procedure Act of 1946, 5 U.S.C. §§ 551-559, 701-706 (1982 & Supp. II 1984).
- 16 Over one-half of the 40 INS staff members interviewed for an INS report stated that they had never heard of EVD. Not a single field officer was able to name the countries to which EVD then applied. INS, Asylum Adjudications, supra note 1, at 66.
- 17 See INS Wire of Feb. 6, 1984, reprinted in 61 INTERPRETER RELEASES 103 (1984) (internal memorandum distinguishing 'extensions' of voluntary departure from EVD). Several commentators have urged the renaming of EVD as a solution to the confusion. See notes 197-98 infra and accompanying text.
- 18 See 8 U.S.C. § 1252(b) (1982), quoted in note 20 infra, and 8 U.S.C. § 1254(e) (1982), quoted in note 19 infra. Voluntary departure originally evolved through the ad hoc practices of administrative officers. The Alien Registration Act codified the practice in 1940. 2 C. GORDON & H. ROSENFIELD, supra note 1, § 7.2a.
- 19 With exceptions not relevant here, [t] he Attorney General may, in his discretion, permit any alien under deportation proceedings . . . to depart voluntarily from the United States at his own expense in lieu of deportation if such alien shall establish to the satisfaction of the Attorney General that he is, and has been, a person of good moral character for at least five years immediately preceding his application for voluntary departure under this subsection.
  - 8 U.S.C. § 1254(e) (1982) (emphasis added).
- 20 In the discretion of the Attorney General, and under such regulations as he may prescribe, deportation proceedings . . . need not be required in the case of any alien who admits to belonging to a class of aliens who are deportable under section 1251 of this title if such alien voluntarily departs from the United States at his own expense, or is removed at Government expense as hereinafter authorized . . ..
  - 8 U.S.C. § 1252(b) (1982) (emphasis added).
- 21 Unlike deportation, voluntary departure (1) 'avoids the stigma of compulsory ejection;' (2) 'facilitates the possibility of return to the United States;' (3) 'often entails the certainty of speedy return;' and (4) 'enables the applicant to select his own destination.' 2 C. GORDON & H. ROSENFIELD, supra note 1, § 7.2a, at pp. 7-18 to 7-19; see also Tzantarmas v. United States, 402 F.2d 163, 165 n.1 (9th Cir. 1968) (discussing benefits of voluntary departure), cert. denied, 394 U.S. 966 (1969); Comment, Suspension of Deportation: Illusory Relief, 14 SAN DIEGO L. REV. 229, 253-54 (1976) (same).
- 22 8 U.S.C. § 1182(a)(16) (1982) provides that aliens who have been deported are excluded from admission into the United States for one year unless the Attorney General consents to their application for readmission.
- 23 See text at notes 25-32 infra.
- 24 With exceptions not relevant here, 'any grant of voluntary departure shall contain a time limitation of usually not more than 30 days, and an extension of the original voluntary departure time shall not be authorized except under meritorious circumstances.' 8 C.F.R. § 242.5(a)(3) (1986).
- 25 8 C.F.R. § 242.5(a)(3) (1986).
- 26 8 C.F.R. § 242.5(a)(2)(viii) (1986).
- 27 8 C.F.R. § 242.5(a)(3) (1986); see also note 147 infra and accompanying text (describing provisions of INS Operations Instructions on extensions of voluntary departure).

- 28 8 C.F.R. § 242.5(a)(2)(vii) (1986).
- 29 8 C.F.R. § 242.5(a)(2)(v) (1986).
- 30 Voluntary departure may be granted to any alien who is statutorily eligible: . . . (vi) who is admissible to the United States as an immigrant and: (A) Who is an immediate relative of a U.S. citizen, or (B) is otherwise exempt from the numerical limitation on immigrant visa issuance, or (C) has a priority date for an immigrant visa not more than 60 days later than the date show [sic] in the latest Visa Office Bulletin and has applied for an immigrant visa at an American Consulate which has accepted jurisdiction over the case, or (D) who is a third-preference alien with a priority date earlier than August 9, 1978, or (E) who is the beneficiary of an approved sixth-preference petition who satisfies Examinations without another petition that he/she can qualify for third preference and who cannot obtain a visa solely because a visa number is unavailable, and who has a priority date earlier than August 9, 1978 . . .. 8 C.F.R. § 242.5(a)(2) (1986). Other classes of aliens who are eligible for voluntary departure include aliens who are natives of contiguous territories who are not within the class described above, 8 C.F.R. § 242.5(a)(2)(i) (1986), any alien whose application for extension for stay as a nonimmigrant is being denied, 8 C.F.R. § 242.5(a)(2)(ii) (1986), aliens who have voluntarily surrendered to the INS, 8 C.F.R. § 242.5(a)(2)(iii) (1986), and aliens with valid travel documents
- 31 The status usually may be granted in increments of one year. See 8 C.F.R. § 242.5(a)(3) (1986). However, certain categories of aliens who are admissible as immigrants may receive the status in increments of 30 days, while other categories of aliens may receive an indefinite grant of that status. Id.

and confirmed reservations to leave the United States within 30 days, 8 C.F.R. § 242.5(a)(2)(iv) (1986).

- 32 'An appeal shall not lie from a denial of an application of voluntary departure under this section, but the denial shall be without prejudice to the alien's right to apply for relief from deportation under any provision of law.' 8 C.F.R. § 242.5(b) (1986).
- 33 See note 40 infra.
- 34 See 1A C. GORDON & H. ROSENFIELD, supra note 1, § 5.3e(6a), at pp. 5-47 to 5-48; INS, Asylum Adjudications, supra note 1, at 65. But see note 153 infra (Attorney General has recently asserted that foreign policy considerations control EVD determinations); note 43 infra (EVD granted to Silva letterholders for domestic policy reasons).
- 35 See INS, Asylum Adjudications, supra note 1, at 65 ('The action is a blanket determination, that is, all nationals of a particular country who are in the United States are covered.'); 1A C. GORDON & H. ROSENFIELD, supra note 1, § 5.3e(6a), at pp. 5-47 to 5-48; A. LEIBOWITZ, *supra* note 5, § 5.05, at p. 5-156.
  - EVD is not always granted on a 'blanket' basis, however. On occasion it has been granted on a 'case-by-case' basis. For example, INS instructions regarding Lebanese nationals stated:
  - In view of the continuing civil strife in Lebanon, INS officers, on a case-by-case basis, should view sympathetically requests for extended voluntary departure received from nationals of Lebanon in the United States who have overstayed, where such requests are based upon compelling humanitarian need. There is no blanket policy to grant extended voluntary departure in these cases.
  - INS Policy Statement No. 016 (Feb. 12, 1976), reprinted in INS Declines EVD for Lebanese but Re-Issues 1976 Policy Memo, 62 INTERPRETER RELEASES 899 (1985). The INS Commissioner stated that case-by-case EVD grants were more appropriate in this instance 'because of the highly adverse immigration effects of a blanket grant of extended voluntary departure, and the availability of other remedies for nationals of Lebanon.' Letter from Alan C. Nelson, INS Commissioner, to James Abourezk (Aug. 13, 1985), reprinted in 62 INTERPRETER RELEASES 920 (1985).
- 36 Through grants of EVD,
  - [t]he United States is able to meet its international treaty obligations regarding potential refugees and provide a 'safe haven' while at the same time not granting permanent residency to large groups of aliens outside of regular immigration channels or forcing foreign nationals to renounce their homeland in order to avoid what may be a relatively short-lived crisis.
  - A. LEIBOWITZ, supra note 5, § 5.05, at p. 5-157; see also INS, Asylum Adjudications, supra note 1, at 66. Aliens granted EVD status are still eligible to apply for other types of deportation relief. See INS Wire of Feb. 6, 1984, supra note 17, at 104 ('While the Attorney General's determinations to grant 'EVD' are binding as to enforcement actions involving individuals of the specified nationality, both favorable and unfavorable determinations on EVD leave unchanged the availability of discretionary relief for individual aliens under the Act and regulations.'). The INS has a standard letter

which informs aliens who have been denied asylum, but who are of a nationality covered by EVD, of their eligibility for that status. See 62 INTERPRETER RELEASES 256 (1985) (reprint of letter). INS officers believe that asylum applications from nationals who have been afforded EVD should not be processed while the aliens retain that status. One officer stated: 'A few people might have problems, . . . but overall it would save us a whole lot of trouble. Right now it's almost impossible to adjudicate these claims. If you turn them down, you can't deport them. They only file again, saying conditions in the home country have changed.' INS, Asylum Adjudications, supra note 1, at 70. State Department personnel disagree, however. 'It would be a bigger pull factor. Adjudicating the claims, even though you can't send anyone back, is a big deterrent.' Id.

- 37 See Plaintiffs' Opposition to Defendants' Motion for Partial Summary Judgment on the Issue of Extended Voluntary Departure at 32, Hotel & Restaurant Employees Union, Local 25 v. Smith, 563 F. Supp. 163 (D.D.C. 1983) (No. 82-2203) [hereinafter Plaintiffs' Opposition].
- 38 See also note 134 infra (work authorization and other benefits available to aliens granted EVD status).
- 39 'Refugee' is defined as a person who is either outside his or her country of nationality or habitual residency, or, under special circumstances, within that country, and who suffers from 'persecution or a well-founded fear of persecution on account of race, religion, nationality, membership in a particular social group, or political opinion.' 7 8 U.S.C. § 1101(a)(42) (1982). The procedure by which asylum may be granted to an alien found to be a refugee within the meaning of 8 U.S.C. § 1101(a)(42)(A) (1982) is outlined in 8 U.S.C. § 1158 (1982). In addition, the Refugee Act of 1980 further provides that: 'The Attorney General shall not deport or return any alien . . . to a country if the Attorney General determines that such alien's life or freedom would be threatened in such country on account of race, religion, nationality, membership in a particular social group, or political opinion.' 8 U.S.C. § 1253(h)(1) (1982). For a general discussion of U.S. law regarding refugees, see T.A. ALEINIKOFF & D. MARTIN, supra note 5, at ch. 8; Martin, The Refugee Act of 1980: Its Past and Future, 1982 MICH. Y.B. INTL. LEGAL STUD. 90; Note, Membership in a Social Group: Salvadoran Refugees and the 1980 Refugee Act, 8 HASTINGS INTL. & COMP. L. REV. 305 (1985).
- 40 As stated in note 1 supra, government statistics vary. The chart below reflects the information submitted by the United States as Exhibit E attached to Defendants' Memorandum, supra note 6. The information in parentheses indicates areas in which INS, Asylum Adjudications, supra note 1, at 67-68, differs significantly from the Government's data.

COUNTRY	DATE EVD GRANTED	DATE EVD TERMINATED	NOTES
Cuba	11/29/60	11/02/66	See Pub. L. No. 89-732.
Dominican Republic <sup>a</sup>	10/18/66	04/26/78	For aliens arriving betw een 04/24/65 and 06/03/66.
'Western Hemisphere'*	07/01/68	12/31/76	Granted to certain individuals with visa preference dates from 07/01/68 to 12/31/76 in response to an order entered in Silva v. Levi, Civ. Action
'Western Hemisphere'	<sup>08</sup> / <sub>82</sub>	01/31/83	No. 76-C-4268 (N.D. Ill.). aa 'Second grant.'
Czechoslovakia	08/21/68	12/30/77	(From 1977-1981, EVD granted in one-year increments. Extensions now determined on case-by-case basis.)
Chile	04/09/71	12/30/77 (05/18/71)	,
Cambodia	04/04/75	10/28/77	See Pub. L. No. 95-145.
Vietnam	04/04/75	10/28/77	See Pub. L. No. 95-145.
Laos	07/09/75	10/28/77	See Pub. L. No. 95-145.
(Lebanon)	(02/12/76)	(Still in effect)	(INS views requests 'sympathetically' on a case-by-case basis.)

Ethiopia	07/12/77	Still in effect.	[See Legislative Relief For Salvadorans and Nicaraguans Receives Renewed Consideration, 63 INTERPRETER RELEASES 626, 627 [hereinafter Legislative Relief] (EVD still in effect as of 07/28/86).] [See Legislative Relief, supra
Еппоріа	0//12///	Still in effect.	(EVD still in effect as of 07/28/86).]
(Hungary)	(12/30/77)	( <sup>04</sup> / <sub>81</sub> )	(From 12/30/77 to <sup>04</sup> / <sub>81</sub> , EVD granted in one-year increments. Since 04/29/81, extensions decided on caseby-case basis.)
(Rumania)	(12/30/77)	( <sup>04</sup> / <sub>81</sub> )	(From 12/30/77, to <sup>04</sup> / <sub>81</sub> , EVD granted in one-year increments. Since 04/29/81, extensions decided on caseby-case basis.)
Uganda	06/08/78	Still in effect.	[Scheduled to expire 09/30/86; see INS Wire of July 31, 1986, reprinted in 63 INTERPRETER RELEASES 649 (1986).]
Iran	04/16/79 Renewed: 08/06/79	12/13/79	(Case-by-case determinations still in effect today.)
Nicaragua	07/03/79 Renewed: 08/29/79 01/04/80 07/01/80	09/28/80	(Case-by-case determinations in effect today.)
Mexico	12/31/79	08/25/81	Granted for certain second preference visa holders in response to an order entered in Contreras v. Bell, Civ. Action No. 80-1590 (N.D. Ill.).
Afghanistan	12/02/80	Still in effect.	[See INS Wire of Dec. 2, 1980, reprinted in 62 INTERPRETER RELEASES 106 (1985) (current policy on Afghans); Legislative Relief, supra (EVD still in effect as of 07/28/86).]
Poland	12/23/81 Renewed: 03/25/82 06/21/82 12/20/82 06/30/83	Still in effect.	[Scheduled to expire 12/30/86; see INS Wire of June 18, 1986, reprinted in 63 INTERPRETER RELEASES 539 (1986)]

# **Footnotes**

These countries were not included on the INS list.

<sup>\*\*</sup> See note 43 infra.

- 41 The INS states that the Attorney General acts 'on a specific State Department recommendation,' INS, Asylum Adjudications, supra note 1, at 65, and that '[t]he Attorney General has always accepted the State Department's recommendation, even though it might be only a brief paragraph or two.' *Id.* at 70-71. Government officials accept the role of the State Department in these determinations as proper, even though Congress has neither mandated nor sanctioned the practice. See, e.g., Letter from Senator Edward Kennedy to Alexander Haig, Secretary of State (Apr. 6, 1981), reprinted in 128 CONG. REC. 1702 (1982) ('Clearly, the Immigration Service must await a formal recommendation from the Department of State prior to initiating a policy of automatically granting stays of voluntary departure.'); Letter from William F. Smith, Attorney General, to Representative Lawrence J. Smith (July 19, 1983), reprinted in Defendants' Memorandum, supra note 6, at Exhibit D ('There have been occasions when the Attorney General, in consultation with the Secretary of State, has determined to delay temporarily expulsion of aliens [of] particular nationalities.').
- 42 See, e.g., INS Wire of Dec. 12, 1978, reprinted in 55 INTERPRETER RELEASES 85 (1978) ('The civil strife in [Lebanon] continues and this is to reaffirm that officers should, on a case by case basis, view sympathetically requests for extended voluntary departure where such requests are based on compelling humanitarian need.').
- 43 See, e.g., INS Wire of Jan. 21, 1982, reprinted in 59 INTERPRETER RELEASES 85 (1982) (emphasis in original): Service action shall not be taken to enforce departure to Poland, prior to March 31, 1982, of Polish nationals who are residents or former residents of Poland and who indicate an unwillingness to return to Poland at the present time under the unstable conditions currently existing there. Extensions of temporary stay may be granted to those non-immigrants who qualify for such extensions. If an application is denied, the Polish national's departure shall not be enforced prior to March 31, 1982. Polish nationals who are located as deportable aliens will be permitted to remain until March 31, 1982. Deportation hearings will be postponed until after March 31, 1982, for those Polish nationals for whom OSC's [orders to show cause] have been issued and hearings have not commenced. Those hearings for Polish nationals which have commenced shall go forward; however, departure shall not be enforced prior to March 31, 1982. In those cases where a final order of deportation has been entered, departure shall not be enforced prior to March 31, 1982. See also INS Wire of July 12, 1982, reprinted in 59 INTERPRETER RELEASES 456 (1982) (INS instructions on EVD

The Attorney General did deviate from his usual practice when, after the Senate passed an immigration bill, he granted EVD to Silva letterholders (most of whom were Mexican nationals) in anticipation of the House passing a similar bill legalizing their presence in the United States. As INS, Asylum Adjudications, supra note 1, at 68 n.\*, notes:

This action was unique in that it was the first time blanket extended voluntary departure was granted primarily for domestic policy considerations rather than a crisis in the foreign national's homeland; it was also the first time the Attorney General acted unilaterally without a specific recommendation from the Department of State.

See generally Staff Report, The Silva Case, in U.S. IMMIGRATION POLICY AND THE NATIONAL INTEREST, STAFF REPORT OF THE SELECT COMMISSION ON IMMIGRATION & REFUGEE POLICY, app. D at 71 (1981) [hereinafter SCIRP].

- 44 See Part IV infra.
- 45 See notes 1 & 40 supra and accompanying text.
- 46 See note 9 supra.
- 47 563 F. Supp. 157 (D.D.C. 1983).
- 48 **594** F. Supp. at 504.
- 49 In May, 1981, the Justice Department responded to a request from Senator Edward Kennedy that it grant EVD status to Salvadoran nationals by stating that it had 'received word from the Department of State that it [was] not in a position to recommend a blanket granting of voluntary departure for illegal Salvadorans presently in the United States.' Letter from David Crosland, Acting Commissioner of INS, to Senator Edward M. Kennedy (May 1, 1981), reprinted in 128 CONG. REC. 1703 (1982). Congress then included a provision in the International Security and Development Cooperation Act, Pub. L. No. 97-113, § 731, 95 Stat. 1557 (1981), which stated:

It is the sense of the Congress that the administration should continue to review, on a case-by-case basis, petitions for extended voluntary departure made by citizens of El Salvador who claim that they are subject to persecution in their homeland, and should take full account of the civil strife in El Salvador in making decisions on such petitions.

A similar request from 89 members of the House of Representatives in April 1983 was also rejected by the Attorney General and the Secretary of State. *See* letters reprinted in *Hearing on H.R. 4447, supra* note 7, at 84-88. Again, Congress responded with a 'sense of the Congress' resolution. Department of State Authorization Act, Fiscal Years 1984 and 1985, Pub. L. No. 98-164, § 1012, 97 Stat. 1062 (1983), provided:

- (a) The Congress finds that—
- (1) ongoing fighting between the military forces of the Government of El Salvador and opposition forces is creating potentially life-threatening situations for innocent nationals of El Salvador;
- (2) thousands of El Salvadoran nationals have fled from El Salvador and entered the United States since January 1980;
- (3) currently the United States Government is detaining these nationals of El Salvador for the purpose of deporting or otherwise returning them to El Salvador, thereby irreparably harming the foreign policy image of the United States;
- (4) deportation of these nationals could be temporarily suspended, until it became safe to return to El Salvador, if they are provided with extended voluntary departure status; and
- (5) such extended voluntary departure status has been granted in recent history in cases of nationals who fled from Vietnam, Laos, Iran, and Nicaragua.
- (b) Therefore, it is the sense of the Congress that—
- (1) the Secretary of State should recommend that extended voluntary departure status be granted to aliens—
- (A) who are nationals of El Salvador,
- (B) who have been in the United States since before January 1, 1983,
- (C) who otherwise qualify for voluntary departure (in lieu of deportation) under section 242(b) or 244(e) of the [INA]
- ( 8 U.S.C. 1252(b) and 1254(e)), and
- (D) who were not excludable from the United States at the time of their entry on any ground specified in section 212(a)
- of the [INA] ( 8 U.S.C. 1182(a)) other than the grounds described in paragraphs (14), (15), (20), (21), and (25); and (2) such status should be granted to those aliens until the situation in El Salvador has changed sufficiently to permit their safely residing in that country.

Another 'sense of the Congress' provision crept into title IV of the Simpson-Mazzoli Bill, H.R. 1510, 98th Cong., 1st Sess. § 401 (1983) (passed by the House, June 20, 1984):

It is the sense of Congress that in the case of nationals of El Salvador who otherwise qualify for voluntary departure (in lieu of deportation) under the Immigration and Nationality Act, the Attorney General shall extend the date such aliens are required to depart voluntarily until such date as the Secretary of State determines that the situation in El Salvador has changed sufficiently to permit their safely returning to El Salvador.

Bills requiring the Attorney General to grant EVD status to Salvadoran nationals were introduced in both houses during the second session of the 98th Congress, *see* S. 2131, 98th Cong., 2d Sess. (1984); H.R. 447, 98th Cong., 2d Sess. (1984), and the first session of the 99th Congress, *see* S. 377, 99th Cong., 1st Sess. (1985); H.R. 822, 99th Cong., 1st Sess. (1985).

- See note 8 supra.
- 51 Relatively few Salvadorans receive any kind of immigration relief in the United States. Approximately 4000 Salvadorans enter the United States illegally each months, one-quarter of whom are apprehended by the INS. S. STEPHEN, EDUCATION AND PUBLIC WELFARE DIVISION, CONGRESSIONAL RESEARCH SERVICE, LIBRARY OF CONGRESS, U.S. POLICY TOWARDS UNDOCUMENTED SALVADORANS 1 (MB82223) (May 6, 1986); UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES MISSION TO MONITOR INS ASYLUM PROCESSING OF SALVADORAN ILLEGAL ENTRANTS, Sept. 13-18, 1981 [hereinafter UNHCR REPORT], reprinted in 128 CONG. REC. 1698, 1699 (1982) (only one of every four illegal Salvadorans is apprehended). There are an estimated 300,000 to 500,000 Salvadorans currently residing illegally in the United States. H.R. REP. NO. 1142, 98th Cong., 2d Sess. pt. I, at 2 (1984). The great majority of those caught by the INS depart voluntarily from the United States. UNHCR REPORT, supra, at 1701 (90% of all apprehended Salvadorans return 'voluntarily' to El Salvador). Very few Salvadorans are granted asylum relief. Only one Salvadoran received asylum in Fiscal Year 1981, id. at 1698, prompting the UNHCR to conclude that the United States was violating its responsibilities under the United Nations Protocol Relating to the Status of Refugees, Jan. 31, 1967, 19 U.S.T. 6223, T.I.A.S. No. 6577, 606 U.N.T.S. 267. See UNHCR REPORT, supra, at 1698. The Salvadorans have fared somewhat better in recent years. In Fiscal Year 1983, 163 requests by Salvadoran nationals for asylum relief were granted and 6576 were denied. In Fiscal Year 1984, 328 were granted and 13,045 were denied. See S. STEPHEN, supra, at 2. Nonetheless, only 2.28% of asylum requests by

Salvadoran nationals were granted in Fiscal Year 1984 as compared to an average of 30% for all other nationalities. See Note, supra note 39, at 330; see also Note, supra note 7, at 705 & nn. 11, 12 (statistics on asylum applications). A number of suits were brought on behalf of Salvadorans denied refugee status, alleging various discriminatory practices and procedural improprieties by the government. For a discussion of these cases, see Note, *supra* note 5, at 304-09.

- 52 563 F. Supp. at 162. The plaintiff sought a declaratory judgment and injunctive relief. It also alleged that the State Department routinely denied asylum applications of Salvadorans without regard to the merit of the individual claims, in violation of 'the Fifth Amendment to the Constitution, the United Nations Convention and Protocol on the Status of Refugees, 8 U.S.C. § 1158, and Department of State Notice 351. Notice 351. 563 F. Supp. at 161.
- 53 563 F. Supp. at 159.
- 54 563 F. Supp. at 163.
- 55 Hotel & Restaurant Employees Union, Local 25 v. Smith, 594 F. Supp. 502 (D.D.C. 1984). The defendants filed two motions for summary judgment: one pertaining to the EVD claim and the other pertaining to the asylum procedures claim. Both were granted.
- 56 The court stated that EVD is 'a matter of the Attorney General's prosecutorial discretion, after his review of the evidence, to suspend, or . . . not to suspend enforcement of the immigration laws in a specific case.' 594 F. Supp. at 507. The court followed the parties' leads in classifying EVD in this manner. The defendants had characterized EVD as 'an extraordinary form of relief arising not from the various rights and remedies specifically provided by the [Immigration and Nationality Act of 1952], but from the Executive's discretionary authority in the formulation and implementation of prosecutorial and foreign policy.' Defendants' Memorandum, supra note 6, at 2. They asserted that '[t]he 'benefit' enjoyed by members of an alien class for which [EVD] has been granted is the ability, through deferred prosecution of the deportation provisions, to extend their stay in the United States.' Id. at 26. Hence, they argued, the authority to grant EVD lies in 'the Executive's broad constitutional authority [to exercise] prosecutorial discretion as to the proper enforcement of federal law.' Id. at 19 n.13. The plaintiff acquiesced in the defendants' description of EVD as an exercise in prosecutorial discretion, stating that the issue presented was 'the reviewability of an agency's enforcement discretion.' Plaintiffs' Opposition, supra note 37, at 13; see also T. A. ALEINIKOFF & D. MARTIN, supra note 5, at 727 (EVD 'is essentially an exercise of prosecutorial discretion'). This Note argues that EVD is not properly viewed as an exercise of prosecutorial discretion. See Part IV.A infra.
- 57 See notes 71-76 infra and accompanying text. The court dis review the Attorney General's decision to determine if it was 'rationally based' in accordance with the rule laid out in Fiallo v. Bell, 430 U.S. 787, 794-96 (1977). The court found that the Attorney General's decision was rationally based upon 'foreign policy considerations' as well as several other factors, including:
  - (i) the number of illegal Salvadoran aliens currently in the United States, (ii) the current crisis in generally controlling the 'floodtide' of illegal immigration, (iii) the prospect of encouraging further illegal immigration, (iv) the effect of such illegal immigration upon this country's limited law enforcement capabilities, social services and economic resources, and (v) the availability under the Immigration and Nationality Act of alternate avenues of relief, such as asylum.
  - 594 F. Supp. at 508.
- 58 594 F. Supp. at 505. The court stated that EVD is a term not found anywhere in the Immigration and Nationality Act or in the applicable regulations. Rather, the term Extended Voluntary Departure describes the Attorney General's discretion in determining the circumstances of both foreign and domestic policy which may give rise to a discretionary decision to grant a temporary suspension of deportation proceedings to members of a particular class of illegal aliens. As such, EVD is based on the prosecutorial

discretion of the Attorney General after consultation or advice received from the State Department.

- 594 F. Supp. at 505.
- 59 See note 65 infra and accompanying text.

- 60 See note 68 infra and accompanying text.
- 61 See note 70 infra and accompanying text.
- 62 594 F. Supp. at 505.
- 63 E 594 F. Supp. at 505 (quoting Harisiades v. Shaughnessy, 342 U.S. 580, 588-89 (1952)). Article II, § 2 of the Constitution places responsibility for the conduct of foreign affairs in the executive branch.
- 64 594 F. Supp. at 505 (quoting United States *ex rel*. Knauff v. Shaughnessy, 338 U.S. 537, 542 (1950)).
- 65 594 F. Supp. at 505 (citing United States v. Nixon, 418 U.S. 683, 693 (1974)).
- 66 594 F. Supp. at 505 (citing Johns v. Department of Justice, 653 F.2d 884, 893 (5th Cir. 1981); Weisburg v. Department of Justice, 489 F.2d 1195, 1201 (D.C. Cir. 1973), cert. denied, 416 U.S. 993 (1974)).
- 594 F. Supp. at 505 (citing Harisiades v. Shaughnessy, 342 U.S. 580, 596-97 (1952); Ludecke v. Watkins, 335 U.S. 160, 164 (1948)). Since EVD status merely postpones application of the deportation provisions of the INA, the court found EVD to be no more than 'an exercise of the Executives [sic] 'pure enforcement power." 594 F. Supp. at 505 (quoting Attorney Gen. v. Irish People, Inc., 684 F.2d 928, 948 (D.C. Cir. 1982), cert. denied, 459 U.S. 1172 (1983)).
- 68 594 F. Supp. at 505-06 (quoting 8 U.S.C. § 1103(a) (1982)).
- 594 F. Supp. at 506 (quoting Fook Hong Mak v. INS, 435 F.2d 728, 730 (2d Cir. 1970)). The federal courts have used this reasonable relationship test in the immigration law area to uphold the Attorney General's discretionary decisions to impose differing reporting requirements on nonimmigrant alien students on the basis of nationality, Narenji v. Civiletti, 617 F.2d 745, 747 (D.C. Cir. 1979), cert. denied, 446 U.S. 957 (1980), to extend the stay of a nonimmigrant alien, Unification Church v. Attorney Gen., 581 F.2d 870, 877-78 (D.C. Cir.), cert. denied, 439 U.S. 828 (1978), to restrict employment of nonimmigrant alien students, see Ahmed v. United States, 480 F.2d 531, 533-34 (2d Cir. 1973); Pilapil v. INS, 424 F.2d 6, 11 (10th Cir.), cert. denied, 400 U.S. 908 (1970), and to deny aliens admitted without a visa eligibility to apply for permanent resident status, Fook Hong Mak v. INS, 435 F.2d 728, 730 (2d Cir. 1970).
- The court stated that 'the fact that EVD is extrastatutory in no way effects [sic] its validity as a discretionary action under the Act.' 594 F. Supp. at 506. Further, the court noted, '[t]his Circuit has held that the Act 'need not specifically authorize each and every action taken by the Attorney General, so long as his action is reasonably related to the duties imposed on him." 594 F. Supp. at 506 (quoting Narenji v. Civiletti. 617 F.2d 745, 747 (D.C. Cir. 1979), cert. denied, 446 U.S. 957 (1980)).
- 71 594 F. Supp. at 506.
- <sup>72</sup> 5 U.S.C. § 704 (1982).
- 73 594 F. Supp. at 506.
- 74 5 U.S.C. § 701(a)(2) (1982).
- 75 594 F. Supp. at 506 (quoting S. REP. NO. 752, 79th Cong., 1st Sess. 26 (1945)).
- 76 594 F. Supp. at 507. The court noted that:

The factors involved in determining the propriety of judicial review of an agency's exercise of discretion are the breadth of the discretionary power, the administrative expertise as balanced against judicial competence to evaluate the action at issue, whether there exists meaningful criteria by which a court may evaluate the action, and whether the decision is one based on policies to which a court must defer to the political branches.

- 594 F. Supp. at 507 (citations omitted).
- 594 F. Supp. at 507.
- 78 594 F. Supp. at 507.
- 79 '[M]atters relating 'to the conduct of foreign relations . . . are so exclusively entrusted to the political branches of government as to be largely immune from judicial inquiry or interference." Regan v. Wald, 468 U.S. 222, 242 (1984) (citation omitted), quoted in Employees Union, 594 F. Supp. at 507; see also notes 62 & 63 supra and accompanying text.
- 80 This Court cannot claim to have the expertise needed to decide such issues of foreign policy, and will defer to the Executive, to whom this area has been Constitutionally entrusted. Only in the case of a clear abuse of discretion may a Court impose its judgment over that of the Executive in a case such as the one at bar.
  - 594 F. Supp. at 507 (citations omitted).
- 81 594 F. Supp. at 507.
- 82 594 F. Supp. at 508. The court stated that not only did the standard not exist, but that the standard would be too difficult to define and enforce if it did:

For a Court to order EVD in this case would set a far-reaching precedent, wholly within the perogatives [sic] of Congress, and might then apply to all situations of widespread fighting, destruction and the breakdown of public services and order throughout the world. Also, such situations as famine, drought, or other natural disasters might at any time also raise 'humanitarian' concerns, wherever they might occur. To require the Attorney General to grant blanket EVD status to all such nationals would be to open up irresponsibly the floodgates to illegal aliens, without regard to foreign policy and internal immigration concerns, or, of equal importance, to the concerns of American working men and women in the United States and our taxpayers generally.

- 594 F. Supp. at 508.
- 83 594 F. Supp. at 508. The court also found that the Salvadorans had not been denied due process as a result of the Attorney General's refusal to grant them EVD status, 594 F. Supp. at 508-09, and that summary judgment was appropriate since plaintiff failed to refute defendants' statement of material facts. \$\bigcells\$ 594 F. Supp. at 509-10.
- 84 See Part III.A infra.
- 85 See notes 91-96 infra and accompanying text.
- 86 See notes 97-105 infra and accompanying text.
- 87 Immigration has long been a maverick, a wild card, in our public law. Probably no other area of American law has been so radically insulated and divergent from those fundamental norms of constitutional right, administrative procedure, and judicial role that animate the rest of our legal system. In a legal firmament transformed by revolutions in due process and equal protection doctrine and by a new conception of judicial role, immigration law remains the realm in which government authority is at the zenith, and individual entitlement is at the nadir. Schuck, The Transformation of Immigration Law, 84 COLUM. L. REV. 1, 1 (1984); see also Verkuil, A Study of Immigration Procedures, 31 UCLA L. REV. 1141, 1144 (1984) ('[u]ntil recently law has been the handmaiden of immigration policy').

- 88 See, e.g., Legomsky, Immigration Law and the Principle of Plenary Congressional Power, 1984 SUP. CT. REV. 255, 255 (Supreme Court should cease affording special deference to Congress in immigration matters); Ludd, *The Essentiality* of Judicial Review: Toward a More Balanced Understanding of Administrative Discretion in American Government, in ADMINISTRATIVE DISCRETION AND PUBLIC POLICY IMPLEMENTATION 14 (1986) [hereinafter Ludd, Balanced Understanding]; Ludd, Administrative Discretion and the Immigration and Naturalization Service: To Review or Not to Review?, 8 THURGOOD MARSHALL L. REV. 65, 65 (1983); Schuck, supra note 87, at 3 n.12 (citing scholars who have attacked the current privileged position of immigration law); Verkuil, supra note 87, at 1144.
- 89 Schuck, supra note 87, at 2-4.
- 90 Id. at 2. Schuck states:

The liberalism of America's first century conceived of persons as autonomous, self-defining individuals possessing equal moral worth and dignity and equally entitled to society's consideration and respect. This entitlement was in principle universally shared, a natural right deriving not from the particularities of one's time, place, or status, but from one's irreducible humanity.

Id.; see also Development in the Law—Immigration Policy and the Rights of Aliens, 96 HARV. L. REV. 1286, 1292-93 (1983) [hereinafter *Developments*] ('The liberal view is that the fulfillment of the individual comes not in participating in the public life of the State, but in choosing and pursuing her own goals in private life.') (footnotes omitted). Schuck perhaps paints too rosy a picture of early immigration policy. As a government study noted, a certain measure of xenophobia existed in the United States from its first days. This distrust manifested itself in restrictive naturalization laws and virulent rhetoric against certain ethnic and religious groups. See SCIRP, supra note 43, at 161-200.

- 91 Schuck, *supra* note 87, at 3.
- 92 Id. ('Liberal values were challenged by an array of exclusionary impulses—racist and class-based opposition to Chinese laborers, nativist xenophobia, religious bigotry, and political reaction against radical movements drawing upon new immigrant groups.') (footnote omitted). See generally Note, supra note 39, at 306-09 (describing early immigration legislation).
- 93 Schuck, *supra* note 87, at 3 (footnote omitted). Schuck identifies three causes of the shift to classical immigration law. First, the focus of immigration shifted from Protestant, northern or western European nations to Catholic, eastern or southern European countries, and the Orient. Americans reacted with a rising well of distrust of these racially and religiously 'different' aliens. Id. at 5-6. For a more detailed account of the reaction to the changing face of American immigration, see SCIRP, supra note 43, at 161-200. The reaction to Asian immigration was particularly violent. In fact, the start of the classical immigration period can almost be marked by the passage of the Chinese Exclusion Act, ch. 126, 22 Stat. 58 (1882), the first racist, restrictionist immigration statute enacted in the United States. Second, American society developed a new 'nationalistic' sense as it matured into an industrialized world power, leading to an increased sense of national autonomy and world leadership. Schuck, *supra* note 87, at 6. Finally, restrictionist immigration policy grew out of the nation's conception of its own sovereignty: 'Sovereignty entailed the unlimited power of the nation, like that of the free individual, to decide whether, under what conditions, and with what effects it would consent to enter into a relationship with a stranger.' Id. Thus, the only obligations the government was perceived as owing to an alien were those it voluntarily undertook. Id.
- 94 See, e.g., Fong Yue Ting v. United States, 149 U.S. 698, 724 (1893) (aliens are 'subject to the power of Congress to expel them or to order them to be removed and deported from the country, whenever in its judgment their removal is necessary or expedient for the public interest'); Nishimura Ekiu v. United States, 142 U.S. 651, 659 (1892) ('It is an accepted maxim of international law, that every sovereign nation has the power, as inherent in sovereignty, and essential to self-preservation, to forbid the entrance of foreigners within its dominions, or to admit them only in such cases and upon such conditions as it may see fit to prescribe.').

The immigration power has historically been vested in the legislative branch of the government. See Kleindienst v. Mandel, 408 U.S. 753, 767 (1972) (quoting Galvan v. Press, 347 U.S. 522, 531 (1954)) ('[T]hat the formulation of [immigration and naturalization] policies is entrusted exclusively to Congress has become about as firmly embedded in the legislative and judicial tissues of our body politic as any aspect of our federal government.'); 1 C. GORDON & H. ROSENFIELD, supra note 1, §§ 1.5a, 2.2a.

The Chinese Exclusion Case, 130 U.S. 581, 606 (1889) ('[If Congress] considers the presence of foreigners of a different race in this country, who will not assimilate with us, to be dangerous to its peace and security, . . . its determination is conclusive upon the judiciary.'). The Court's denial of its own power in this area remains good law today:

At the outset, it is important to underscore the limited scope of judicial inquiry into immigration legislation. This Court has repeatedly emphasized that 'over no conceivable subject is the legislative power of Congress more complete than it is over' the admission of aliens. Our cases 'have long recognized the power to expel or exclude aliens as a fundamental sovereign attribute exercised by the Government's political departments largely immune from judicial control.' Our recent decisions have not departed from this long-established rule.

Fiallo v. Bell, 430 U.S. 787, 792 (1977) (citations omitted); accord Kleindienst v. Mandel, 408 U.S. 753, 766 (1972); Oceanic Stream Navigation Co. v. Stranahan, 214 U.S. 320, 340 (1909). The Court has afforded similar deference to administrative officials as well. See INS v. Miranda, 459 U.S. 14, 19 (1982) (per curiam) ('[T]he INS is the agency primarily charged by Congress to implement the public policy underlying [immigration] laws. Appropriate deference must be accorded its decisions.') (citations omitted); INS v. John Ha Wang, 450 U.S. 139, 145 (1981) (per curiam).

- This judicial deference has been termed the 'plenary power' doctrine. See generally Legomsky, supra note 88 (discussing plenary power doctrine, which the Supreme Court has cited in declining to review immigration laws for compliance with substantive constitutional limits). Laws affecting aliens' rights and obligations (e.g., their eligibility for welfare programs or their duty to serve in the armed forces) are subject to limited review for rationality if challenged as discriminatory.

  Mathews v. Diaz, 426 U.S. 67, 82-83 (1976); Flemming v. Nestor, 363 U.S. 603, 611 (1960); see also Legomsky, supra note 88, at 256. The courts will also review congressional actions regarding deportation to ensure that the aliens are afforded procedural due process. Wong Yang Sung v. McGrath, 339 U.S. 33 (1950); The Japanese Immigrant Cases, 189 U.S. 86, 100 (1903) (dictum); see also Legomsky, supra note 88, at 259. Although the plenary power doctrine applies only to congressional actions, its effects have been extended to cover INS actions in some instances. Id. at 257. In reviewing administrative decisions in the immigration field, courts generally will inquire only as to whether the decision was irrational or in bad faith. See, e.g., Bertrand v. Sava, 684 F.2d 204, 211-13 (2d Cir. 1982); El-Werfalli v. Smith, 547 F. Supp. 152, 153 (S.D.N.Y. 1982). For a discussion of the possible rationales for this deference, see Schuck, supra note 87, at 14-18; Developments, supra note 90, at 1314-22.
- Schuck, *supra* note 87, at 4. This shift has been noted by other authors as well. *See, e.g.*, Legomsky, *supra* note 88, at 306-07; Martin, *Due Process and Membership in the National Community: Political Asylum and Beyond*, 44 U. PITT. L. REV. 165, 193-200 (1983); Verkuil, *supra* note, 87, at 1143-44 (adopting Schuck's classification of the history of immigration law); *Developments, supra* note 90, at 1289-90 (adopting a somewhat different classification, but stating that aliens' rights can be viewed in two ways: as augmenting the national welfare or as intrinsic to their human worth).
- 98 Schuck, *supra* note 89, at 4.
- Communitarianism is, of course, subject to varying definitions. As one scholar noted:
  Communitarianism is a hazy term used to describe any number of different political theories, which may range from conservative Burkean notions to radical left conceptions of the state. Several ideas, however, that seem central to most accounts, are relevant to an understanding of citizenship. Communitarian theory begins with individuals situated in a real society, not in a hypothetical state of nature or on the brink of contract. The individual is seen as an 'encumbered' self. He is defined—or constituted—in part by his relationships, roles, and allegiances. His relationship with the state is based on his identification with and immersion in the society's history, traditions, and core assumptions and purposes. If the bywords of liberal theory are freedom, choice, and consent, the bywords of communitarian theory are solidarity, responsibility, and civic virtue. The operative metaphors for the state are 'family,' 'community,' or 'a people.' From the communitarian perspective, citizenship is seen as an organic relationship between the citizen and the state.

  Aleinikoff, *Theories of Loss of Citizenship*, 84 MICH. L. REV. 1471, 1494 (1986) (footnote omitted). An analysis of the merits of the competing definitions is beyond the scope of this Note. Thus, this Note adopts Professor Schuck's definition.
- Schuck notes that 'communitarianism in immigration law is as yet only embryonic, tentative, and fragmentary.' Schuck, Immigration Law and the Problem of Community, in CLAMOR AT THE GATES 298 (N. Glazer ed. 1985). Certainly,

this ideological shift is apparent only at the lower federal court level and has shown no signs of appearing in the Supreme Court yet. See Legomsky, supra note 88, at 304; Schuck, supra note 87, at 58-59; Developments, supra note 90, at 1313. Moreover, since the executive branch actually sets immigration policy, it should be noted that the Reagan administration has thus far shown little intention of adopting this view.

- 101 Schuck discusses five structural pressures for changes: the constraining of American foreign policy, economic changes, increases in refugee and asylum claims, large numbers of illegal aliens, and political shifts caused by changes in the ethnic make-up and geographical concentration of minority groups. Schuck, supra note 87, at 35-47. He identifies several ideological pressures for change as well: 'altered beliefs about the meaning of justice, the rightness or wrongness of certain actions, and the proper role of law and of particular legal institutions in society.' Id. at 34. See generally id. at 47-53.
- 102 Schuck identifies seven elements of classical immigration law undergoing this ideological transformation: (1) the restrictive ideal of national community; (2) the principle of judicial deference; (3) the extraconstitutional status of exclusion; (4) the broad federal power to classify aliens; (5) the civil nature of the deportation sanction; (6) the detention power; and (7) the integration of adjudication and enforcement. *Id.* at 7-8.
- 103 See Plyler v. Doe, 457 U.S. 202 (1982) (states obligated to provide public education to undocumented school-age aliens). Although, as Schuck notes, Plyler involved invalidation of a state, not a federal, law, it nonetheless has important implications for the notion of a national community, since the Court ordered a state to provide a social benefit to aliens whose presence in the United States was in direct violation of federal law. See Schuck, supra note 87, at 54-58.
- 104 Schuck discusses Employees Union in this context. See note 178 infra.
- 105 See Schuck, supra note 87, at 62-65.
- 106 See generally Verkuil, supra note 87.
- 107 The Supreme Court has long held that aliens being deported are entitled to a modicum of procedure. See The Japanese Immigrant Cases, 189 U.S. 86 (1903) (aliens in deportation process entitled to due process protection). Aliens seeking entry to the United States have no such right, however. See Landon v. Plasencia, 459 U.S. 21, 32 (1982) ('This Court has long held that an alien seeking initial admission to the United States requests a privilege and has no constitutional rights regarding his application, for the power to admit or exclude aliens is a sovereign prerogative.') (citations omitted); PShaughnessy v. United States ex rel. Mezei, 345 U.S. 206, 212 (1953); United States ex rel. Knauff v. Shaughnessy, 338 U.S. 537 (1950).
- 108 See Verkuil, supra note 87, at 1149-53 for a suggestion of how those ties might be measured.
- 109 Id. at 1149.
- 110 Id.
- 111 Id. at 1155.
- 112 See generally Sofaer, Judicial Control of Informal Discretionary Adjudication and Enforcement, 72 COLUM. L. REV. 1293 (1972).
- 113 See Soon Bok Yoon v. INS, 538 F.2d 1211, 1213 (5th Cir. 1976) (no judicial review of decision to deny deferred departure status); cf. notes 56 & 67 supra and accompanying text.
- 114 See note 7 supra.
- 115 In all fairness to the Employees Union court, it had no reason not to classify EVD as prosecutorial discretion, since the parties themselves used that label. See note 56 supra. The arguments set forth in this Note, for example, were not before the court.

- The National Academy of Sciences estimates that there are 2 to 4 million illegal aliens in the United States. *See* N.Y. Times, June 25, 1985, at A14, col. 1. Other studies estimate that illegal aliens number about 3.5 to 6 million. *See*, e.g., S. REP. NO. 485, 97th Cong., 2d Sess. 4 (1982); GENERAL ACCOUNTING OFFICE, PROBLEMS AND OPTIONS IN ESTIMATING THE SIZE OF THE ILLEGAL ALIEN POPULATION ii (1982).
- See Roberts, The Exercise of Administrative Discretion Under the Immigration Laws, 13 SAN DIEGO L. REV. 144, 146 (1975).
- See 1A C. GORDON & H. ROSENFIELD, supra note 1, § 5.3e (discussing various forms of prosecutive relief for aliens facing deportation); see also Gordon, Ameliorating Hardships Under the Immigration Laws, 367 ANNALS 85 (1966); Keane, Changing Concepts in Discretionary Relief, 12 I & N REP. 30 (1964); Roberts, Relief from Deportation: Discretion and Waivers, 55 INTERPRETER RELEASES 184, 187 (1978).
- See, e.g., United States v. Lovasco, 431 U.S. 783, 784-85, 792-96 (1977) (affirming prosecutor's discretion to delay filing charges for eighteen months pending results of good-faith investigation); United States v. Thompson, 251 U.S. 407, 412-15 (1920) (affirming prosecutor's discretion to present charges to second grand jury after first grand jury has declined to indict); United States v. Ruggiero, 472 F.2d 599, 606 (2d Cir. 1973) (affirming prosecutor's discretion in determining what to charge), cert. denied, 412 U.S. 939 (1973).
- See, e.g., United States v. Saade, 652 F.2d 1126, 1136 (1st Cir. 1981); United States v. Catlett, 584 F.2d 864, 868 (8th Cir. 1978); Vorenberg, Decent Restraint of Prosecutorial Power, 94 HARV. L. REV. 1521, 1525 (1981).
- See, e.g., Newman v. United States, 382 F.2d 479, 481-82 (D.C. Cir. 1967); Givelber, The Application of Equal Protection Principles to Selective Enforcement of the Criminal Law, 1973 U. ILL. L.F. 88, 101-02.
- Kaplan, The Prosecutorial Discretion—A Comment, 60 NW. U. L. REV. 174, 178 (1965).
- See, e.g., United States v. Heilman, 614 F.2d 1133, 1139 (7th Cir. 1980), cert. denied, 447 U.S. 922 (1980); United States v. Scott, 521 F.2d 1188, 1195 (9th Cir. 1975), cert. denied, 424 U.S. 955 (1976); Kaplan, supra note 122, at 180.
- See, e.g., United States v. Saade, 652 F.2d 1126, 1136 (1st Cir. 1981); United States v. Catlett, 584 F.2d 864, 868 (8th Cir. 1978).
- See, e.g., United States v. Berrios, 501 F.2d 1207, 1211 (2d Cir. 1974) (judicial review of prosecutorial discretion available only where defendant meets the 'heavy burden' of showing both that others similarly situated were not prosecuted and that he was selected for prosecution on an unconstitutional basis); Inmates of Attica Correctional Facility v. Rockefeller, 477 F.2d 375, 380 (2d Cir. 1973) ('[T]he manifold imponderables which enter into the prosecutor's decision to prosecute or not to prosecute make the choice not readily amenable to judicial supervision.'); 2 K. DAVIS, ADMINISTRATIVE LAW TREATISE § 9.1, at 217-18 (2d ed. 1979).
- Heckler v. Chaney, 470 U.S. 821, 831 (1985).
- 127 470 U.S. at 831.
- See, e.g., Heckler v. Chaney, 470 U.S. 821, 832-33 (1985) (court can review agency decision to enforce to determine whether agency exceeded its statutory powers); United States v. Sacco, 428 F.2d 264, 271 (9th Cir. 1970) ('The conscious exercise of selectivity in enforcement [of alien registration laws] is not in itself a constitutional violation where it is not further alleged that 'the selection was deliberately based upon an unjustifiable standard such as race, religion or other arbitrary classification.") (citation omitted), cert. denied, 400 U.S. 903 (1970). The Supreme Court has erected a presumption of nonreviewability for agency decisions not to enforce, stating that 'when an agency refuses to act it generally does not exercise its coercive power over an individual's liberty or property rights, and thus does not

infringe upon areas that courts often are called upon to protect.' Heckler, 470 U.S. at 832 (emphasis in original). See also Shapiro, Administrative Discretion: The Next Stage, 92 YALE L.J. 1487, 1509-11 (1983).

- 129 Heckler v. Chaney, 470 U.S. 821, 847 (1985) (Marshall, J., concurring) ('Criminal prosecutorial decisions vindicate only intangible interests, common to society as a whole, in the enforcement of the criminal law. The conduct at issue has already occurred; all that remains is society's general interest in assuring that the guilty are punished.').
- 130 Cf. Wildes, The Nonpriority Program of the Immigration and Naturalization Service Goes Public: The Litigative Use of the Freedom of Information Act, 14 SAN DIEGO L. REV. 42, 72 (1976) (arguing that nonpriority program is unlike criminal prosecutorial discretion in that the program is a special program conferring benefits 'based on individual equities').
- 131 Heckler, 470 U.S. at 848. In this case, Justice Marshall noted in response to an agency refusal to act that requests for administrative enforcement typically seek to prevent concrete and future injuries that Congress has made cognizable . . . or to obtain palpable benefits that Congress has intended to bestow . . .. Entitlements to receive these benefits or to be free of these injuries often run to specific classes of individuals whom Congress has singled out as statutory beneficiaries.
  - 470 U.S. at 847-48 (citations omitted). A similar rationale would apply to agency decisions to act.
- 132 See Vorenberg, supra note 120, at 1525.
- 133 Employees Union, 594 F. Supp. at 507; see note 56 supra and accompanying text; cf. Letter from William F. Smith, Attorney General, to Representative Lawrence J. Smith (July 19, 1983), reprinted in Defendants' Memorandum, supra note 6, at Exhibit D (describing EVD as a temporary delay in the expulsion of aliens of a certain nationality).
- 134 INS regulations provide that certain classes of aliens are eligible to be employed in the United States without specific employment authorization. 8 C.F.R. § 109.1(a) (1986). Aliens granted voluntary departure under 8 C.F.R. § 242.5(a)(2) (viii) (1986), see text at note 26 supra, must apply for work authorization under 8 C.F.R. § 109.1(b)(6) (1986) and may be granted permission to be employed for that period of time prior to the date set for voluntary departure including any extension granted beyond such date. Factors which may be considered in granting employment authorization to an alien who has been granted voluntary departure:
  - (i) Length of voluntary departure granted;
  - (ii) Dependent spouse and/or children in the United States who rely on the alien for support;
  - (iii) Reasonable chance that legal status may ensue in the near future; and
  - (iv) Reasonable basis for consideration of discretionary relief. 8 C.F.R. § 109.1(b)(6) (1986). The INS manufal reveals that work authorizations are issued automatically to aliens granted extensions of voluntary departure: 'Aliens who have been granted . . . voluntary departure due to temporary inability to return to their home country because of civil war or catastrophic circumstances there, should be advised of their status by letter . . . The letter should state that . . . employment has been authorized . . ..' IMMIGRATION AND NATURALIZATION SERVICE, OPERATING INSTRUCTIONS, REGULATIONS & INTERPRETATIONS § 242. 10(e)(3) (Apr. 4, 1979). Likewise, the directives notifying the INS field offices of the Attorney General's decision to grant EVD typically provide for work authorization in accordance with the voluntary departure provisions. See, e.g., INS Wire of June 15, 1983, reprinted in 60 INTERPRETER RELEASES 484 (1983) ('Those Polish nationals whose departure has been deferred until December 31, 1983 and who establish appropriate need may be authorized permission to work, as provided in 8 C.F.R. 109.1(b).'); see also INS Wire of May 1, 1984, reprinted in 61 INTERPRETER RELEASES 330 (1984) (work authorizations for Ugandans granted EVD); INS Wire of July 12, 1982, reprinted in 59 INTERPRETER RELEASES 456 (1982) (work authorizations for Ethiopians granted EVD). The authors of one book noted that 'there is no special program [available to aliens granted EVD] for federal assistance like that available to refugees . . ., but it may be that EVD beneficiaries qualify for other general public assistance programs otherwise closed to 'illegal aliens." T.A. ALEINIKOFF & D. MARTIN, supra note 5, at 728 (citations omitted).
- 135 See Resettlement of Cuban Refugees, 41 INTERPRETER RELEASES 98, 99 (1964); cf. SENATE COMM. ON THE JUDICIARY, SUBCOMM. TO INVESTIGATE PROBLEMS CONNECTED WITH REFUGEES AND ESCAPEES PURSUANT TO S. RES. 66, 88TH CONG., 1ST SESS., RESETTLEMENT OF CUBAN REFUGEES 1 (Comm. Print 1963) (introduction by Sen. Hart).

- 136 See note 117 supra and accompanying text.
- 137 See note 167 infra and accompanying text.
- 138 See note 166 infra and accompanying text.
- 139 See note 18 supra.
- 140 These requirements vary, depending upon whether the alien is requesting voluntary departure before, during, or after deportation proceedings, but, in general, they go to the moral worthiness of the alien. See notes 19 & 20 supra. See generally 2 C. GORDON & H. ROSENFIELD, supra note 1, § 7.2.
- 141 See, e.g., Gomez-Fernandez v. INS, 316 F.2d 732 (5th Cir.), cert. denied, 375 U.S. 942 (1963); Hegerich v. Del Guercio, 255 F.2d 701 (9th Cir. 1958); United States ex rel. Ciannamea v. Neelly, 202 F.2d 289 (7th Cir. 1953).
- 142 See notes 18-24 supra and accompanying text.
- 143 See notes 25-32 supra and accompanying text.
- 144 See notes 25-30 supra and accompanying text.
- 145 See notes 26 & 27 supra and accompanying text.
- 146 See text at note 26 supra.
- 147 INS, OPERATIONS INSTRUCTIONS, REGULATIONS & INTERPRETATIONS § 242.10(e)(3) (Apr. 4, 1979).
- 148 See 8 C.F.R. § 242.5(a)(1) (1986).
- 149 See 2 C. GORDON & H. ROSENFIELD, supra note 1, § 7.1b, at pp. 7-9 to 7-13.
- 150 See notes 19 & 20 supra.
- 151 In Fook Hong Mak v. INS, 435 F.2d 728 (2d Cir. 1970), the Second Circuit established that administrators vested with discretionary authority may exercise that authority through blanket, rather than individual, determinations. 435 F.2d at 730; see also Yuk-Ling Wu Jew v. Attorney General, 524 F. Supp. 1258, 1260-61 (D.D.C. 1981) ('A congressional grant of discretion to accord or revoke an immigration privilege does not trigger a requirement that each such proceeding be considered on a case by case basis.'); cf. Kurlan v. Callaway, 381 F. Supp. 594, 596 (S.D.N.Y.), affd. in part and revd. in part, 510 F.2d 274 (2d Cir. 1974) (state executive may exercise his discretion on either a blanket or a case-by-case basis). The Attorney General may determine that 'one paramount element creates such 'likeness' that other elements cannot be so legally significant as to warrant a difference in treatment.' Fook Hong Mak, 435 F.2d at 730. This principle is particularly applicable to EVD, since the 'one characteristic' which entitles the 'group to favorable treatment despite minor variables,' 435 F.2d at 730, is readily apparent. If conditions in the home country are so dangerous as to warrant EVD status for the nationals, case-by-case determinations become a time-consuming administrative burden. A blanket grant is an efficient and sensible response, since it relieves the field officers from the procedural formalities of individual determinations in cases in which the outcome is certain.
- 152 See, e.g., Letter from A. P. Drischler, Acting Assistant Secretary of State for Congressional Relations, to Senator Edward Kennedy (Apr. 17, 1981), reprinted in 128 CONG. REC. 1702 (1982) ('While fighting in some areas has been severe, El Salvador has not suffered the same level of wide-spread fighting, destruction and breakdown of public services and order as did for example, Nicaragua, Lebanon or Uganda at the time when voluntary departure was recommended by the Department [of Justice] and granted by INS for nationals of those countries.'); INS Wire of Jan. 21, 1982, reprinted in 59 INTERPRETER RELEASES 85 (1982) ('Service action shall not be taken to enforce departure to Poland, . . . at the present time under the unstable conditions currently existing there.'); INS Wire of July 3, 1979, reprinted in 56 INTERPRETER RELEASES 325a (1979) ('Service action shall not be taken to enforce departure to Nicaragua, prior to December 31, 1979, of Nicaraguan nationals . . . who indicate an unwillingness to return to that country at the present time under the unstable conditions currently existing there.') (emphasis in original); INS Wire of Aug. 29, 1979, reprinted in 56 INTERPRETER RELEASES 436 (1979) ('The Department of State has recommended against

the forcible return to Nicaragua of any Nicaraguan nationals . . . due to the unsettled conditions in Nicaragua.'); INS Wire of Dec. 4, 1978 (copy on file at Michigan Law Review) ('The civil strife in that country [Lebanon] continues.'); Letter of William P. Clark, Deputy Secretary of State, to Doris Meissner, Acting Commissioner of INS (Aug. 8, 1981) (copy on file at Michigan Law Review) ('Since Ethiopia's revolution took place in 1974 the Department of State has been recommending to the INS that . . . because of unsettled conditions in Ethiopia, Ethiopians whose asylum applications were not approved should not be deported to Ethiopia . . . .').

Gordon and Rosenfield have also noted that the Attorney General sometimes grants EVD status to 'nationals of countries undergoing active hostilities or other dangerous conditions.' 1A C. GORDON & H. ROSENFIELD, supra note 1, § 5.3e(6a), at p. 5-48. The INS itself has described EVD as 'an administratively clean and effective response for our government to make to what are generally temporary but unsafe circumstances in other countries that are likely to improve with time.' INS, Asylum Adjudications, supra note 1, at 71. This also seems to be the view taken by many members of Congress. See, e.g., Hearing on H.R. 4447, supra note 7, at 10 (statement of Rep. Moakley) ('The issue here is not administration foreign policy toward El Salvador . . . . The issue today is a humanitarian one. . . . [W]e are deciding, in light of all of the documented human rights violations in El Salvador, whether it is safe, humane, and just to deport Salvadoran refugees back to their homeland.'); id. at 49 (statement of Rep. Gejdenson) (EVD 'is a humanitarian decision, not a political one.'). Congressmen expressed this view in connection with earlier grants of EVD as well. For example, debate on H. Res. 304 (urging EVD status for Poles) exemplified congressional preoccupation with the humanitarian aspects of EVD. See 127 CONG. REC. 31,493 (1981) (statement of Mr. Rodino) ('[F]avorable action on this resolution would be a clear expression of our humanitarian commitment to these individuals and a recognition of our obligation not to return them, at this time, to Poland.'); id., at 31,494 (statement of Mr. Richmond) ('Our Nation's humanitarian tradition demands that we not expel those whose lives would be threatened by deportation and it is, therefore, imperative that we permit Polish citizens to remain here until they can safely return home.'); id. (statement of Mr. Broomfield) ('[I]t is the humanitarian obligation of the United States to insure that Poles visiting or working in the United States are not thrust back into Poland now.').

153 The Attorney General has denied that any criteria for granting the status exist. See, e.g., Defendants' Memorandum, supra note 6, at 16 ('Plaintiffs erroneously assume that grants of 'extended voluntary departure' are governed exclusively by conditions within the country(ies) in question . . . and that it is both possible and proper to draw country-by-country comparisons between the Executive's determinations concerning 'extended voluntary departure."); Letter from George P. Shultz, Secretary of State, to William F. Smith, Attorney General (June 23, 1983) reprinted in Defendants' Memorandum, supra note 6, at Exhibit C ('[T]he extent of civil unrest alone does not determine the Department's view toward the granting of EVD to nationals of a particular country. The Department invariably considers a number of factors in deciding whether to recommend the granting of EVD in any particular case, and the granting of EVD may meet different objectives in different cases.'). The Attorney General stated that:

[I]t is true . . . that 'extended voluntary departure' has been granted to nationals of Ethiopia, Nicaragua, Poland, and Uganda, at times when such contries were experiencing significant civil disturbances. It is inaccurate, however, to assume that there exists any specific criterion or criteria, such as the occurrence of violence or political instability, by which grants of 'extended voluntary departure' are determined. . . . The decisions made as to 'extended voluntary departure' are reached on a situation by situation basis and are not readily susceptible to comparison or generalization. Each determination is based on examination of a variety of factors unique to each country's situation.

Letter from William F. Smith, Attorney General, to Representative Lawrence J. Smith (July 19, 1983) reprinted in Defendants' Memorandum, supra note 6, at Exhibit D.

The government has asserted that EVD serves primarily as a foreign policy tool. See Memorandum from William F. Smith, Attorney General, to William Clark (Apr. 16, 1983), quoted in Plaintiffs' Opposition, supra note 37, at 63 n.14 (emphasis added):

Historically, a grant of extended voluntary departure to a particular national group by the Attorney General has always been based on a recommendation of the Department of State resulting from its assessment of conditions in a particular country and the foreign policy implications of U.S. Government action in repatriating nationals of that country who are in the United States.

[The Department of] Justice has never independently established an extended voluntary departure program as the need for and implications of such a decision are fundamentally foreign policy in nature.

Granting extended voluntary departure to nationals of one country does not justify or require such a grant to nationals of another country where, while the situation may or may not be similar, the foreign policy benefits or issues may be adjudged to be different.

The general perception of extended voluntary departure is that it is invoked as a humanitarian gesture to protect temporarily persons who are in the U.S. and subject to return when conditions of civil strife or social or political turmoil arise in their homeland. While humanitarian factors have always loomed large in extended voluntary departure decisions, State's recommendation has, with varying degrees, been based on foreign policy grounds.

The plaintiffs in *Employees Union* argued, however, that the government's assertion that EVD is merely a foreign policy tool is no more than a post-hoc rationalization formulated after the filing of the complaint in that case, *see* Plaintiffs' Opposition, *supra* note 37, at 63-64, since humanitarian concerns, not foreign policy objectives, were asserted in connection with earlier grants of EVD. *See* not 152 *supra*. While it is true that the granting of EVD may have some influence upon relations between the United States and the involved country, the impact is likely negligible, as the government itself has recognized. *See*, *e.g.*, Draft Questions and Answers for Elliot Abrams (Feb. 5, 1982, 3:00 p.m. press briefing), *quoted in* Plaintiffs' Opposition, *supra* note 37, at 62:

[QUESTION]: Is it not true that if you were to grant asylum or voluntary departure status to a high proportion of applicants for many or all of the Salvadorans in the US [sic], in effect you would be disparaging the stability and ability of the Salvadoran Government to protect its citizens? Would this not undermine the Administration's policy of support for the Duarte government?

. . . .

[ANSWER]: The decision to grant asylum or voluntary departure unavoidably reflects upon the conditions currently existing in the homeland of the persons affected. In the case of El Salvador, you must remember that a civil war is occurring. That the government cannot maintain perfect order in such circumstances is unsurprising and does not necessarily reflect poorly on it or its leaders. When these facts are considered, I cannot see how the Administration's policy could be harmed.

The granting of EVD to nationals of both Nicaragua and Lebanon at a time when these countries were engaged in favorable relations with the United States further illustrates that EVD has, in the past, functioned as humanitarian relief and not as a pejorative denouncement of the governments involved. In fact, the Salvadoran Ambassador to the United States stated that El Salvador 'view[s] with great sympathy the U.S. policy of granting 'extended departure' status' to Salvadoran nationals, thus diminishing the likelihood that a grant of EVD would be deleterious to U.S.-Salvadoran relations. Eastham, *Salvadorans Seek U.S. Asylum from U.S.-Backed Regime*, United Press International, Mr. 20, 1982 (available on NEXIS). Moreover, as one commentator noted, the Salvadoran government 'should not be too surprised or offended' to find out that the U.S. government believes El Salvador to be unsafe for civilians, given the critical State Department reports on human rights in that country filed with Congress. *See* Note, *supra* note 5, at 330-31.

Finally, EVD grants, unlike grants of refugee status, can be framed in terms that do not condemn the government of the aliens involved:

Since a refugee is defined contentiously as victim or potential victim of persecution, to accept the claim of someone to qualify for refugee status is publicly to accuse some other state of engaging in persecution; to accept large numbers of refugees is to call attention to the extent of other states' misdeeds and to exhibit one's own contrasting humanitarianism. This of course is why there is official reluctance to receive refugees from friendly or allied states, however oppressive to certain of their citizens they may be . . ..

Whelan, Principles of U.S. Immigration Policy, 44 U. PITT. L. REV. 447, 479-80 (1983).

- See note 153 supra.
- See note 76 supra and accompanying text.
- Sang Seup Shin v. INS, 750 F.2d 122, 127 (D.C. Cir. 1984); see also Dworkin, The Model of Rules, 35 U. CHI. L. REV. 14, 33 (1967) ('discretion is not tantamount to license'). Indeed, '[w]hile the extent of power possessed by one exercising discretion varies, in our legal system discretion usually means judgment 'guided by sound legal principles,' producing decisions made 'according to the rules of reason and justice, not according to private opinion . . ..' Sofaer, supra note 112, at 1349 (footnote omitted).
- See notes 72 & 73 supra and accompanying text.

- R. PIERCE, JR., S. SHAPIRO & P. VERKUIL, ADMINISTRATIVE LAW AND PROCESS 182 (1985).
- 159 *Id.* at 182-83.
- 160 Cf. 2 C. GORDON & H. ROSENFIELD, supra note 1, § 7.2d, at 7-31 (denials of voluntary departure or arbitrary restrictions on the privilege are subject to judicial review).
- The *Employees Union* court's preemptive dismissal of judicial review on this basis ignores the very real advantages accruing to aliens from a favorable exercise of EVD discretion. First, aliens derive a substantial benefit from not having to undergo deportation proceedings, regardless of the various forms of relief that may be available in that process. *Cf.* Verkuil, *supra* note 87, at 1153 n.61 ('[A] favorable discretionary action is a very valuable advantage, since it renders the deportation process unnecessary.'). Second, and more important, aliens granted EVD receive a group status; each individual alien need not convince an immigration official to exercise his or her discretion in the alien's favor. Given the vagaries of the immigration relief processes, *see* Sofaer, *supra* note 112, at 1295 (finding that 'inconsistency, arbitrariness and . . . waste correlate with [INS] discretionary power'), the benefits of group relief should not be underestimated.
- See notes 81 & 82 supra and accompanying text.
- 163 See Shapiro, supra note 128, at 1488.
- See 5 U.S.C. §§ 553-557, 706(2)(E) (1982).
- 5 U.S.C. § 706 (1982) provides in relevant part: 'The reviewing court shall . . . (2) hold unlawful and set aside agency action, findings, and conclusions found to be—(A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law . . . .' See generally Shapiro, supra note 128, at 1488-89. As Shapiro notes, it has become 'commonplace' to point out that § 706 is in apparent conflict with § 701, which excepts 'agency action . . . committed to agency discretion by law' from judicial review. Id. at 1489 n.11. By subjecting all agency action to judicial review except where review is barred by statute or committed to agency discretion by law, however, § 701 creates a 'strong presumption' of reviewability. See also Dunlop v. Bachowski, 421 U.S. 560, 567 (1975); Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 410 (1971); Abbot Laboratories v. Gardner, 387 U.S. 136, 140-41 (1967). The Supreme Court has stated that the 'committed to agency discretion' exception is 'very narrow,' Overton Park, 401 U.S. at 410, and that 'it is applicable in those rare instances where 'statutes are drawn in such broad terms that in a given case there is no law to apply." 401 U.S. at 410 (quoting S. REP. NO. 752, 79th Cong., 1st Sess. 26 (1945)). See also Barlow v. Collins, 397 U.S. 159, 166 (1970) ( 'judicial review of such administrative action is the rule, and nonreviewability an exception which must be demonstrated'); Local 1219, American Fedn. of Govt. Employees v. Donovan, 683 F.2d 511, 515 (D.C. Cir. 1982) (citations omitted):

[T]he APA's exception for 'agency action committed to agency discretion' shields from review only those matters for which 'a fair appraisal of the legislative scheme, including a weighing of practical and policy implications of reviewability, persuasively indicates that judicial review should be circumscribed.' Only when 'the considerations in favor of nonreviewability . . . are sufficiently compelling to rebut the strong presumption of judicial review' will we conclude that judicial review is foreclosed.

Thus, '[c]ourts have continuously narrowed the category of actions considered to be so discretionary as to be exempted from review.' Shapiro, *supra* note 128, at 1489 n.11.

- United States *ex rel*. Adel v. Shaughnessy, 183 F.2d 371, 372 (2d Cir. 1950) (footnotes omitted); *see also* Foti v. INS, 375 U.S. 217, 228 (1963); MacKay v. McAlexander, 268 F.2d 35, 40 (9th Cir. 1959), *cert. denied*, 362 U.S. 961 (1960).
- 167

  See, e.g., Kleindienst v. Mandel, 408 U.S. 753, 770 (1972); Kimm v. Rosenberg, 363 U.S. 405 (1960) (per curiam); Goon Wing Wah v. INS, 386 F.2d 292, 294 (1st Cir. 1967); Chen v. Foley, 385 F.2d 929, 934 (6th Cir. 1967), cert. denied,

393 U.S. 838 (1968); Kam Ng v. Pilliod, 279 F.2d 207, 210 (7th Cir. 1960), cert. denied, 365 U.S. 860 (1961); United States ex rel. Ciannamea v. Neelly, 202 F.2d 289, 292 (7th Cir. 1953).

- 168 2 C. GORDON & H. ROSENFIELD, supra note 1, § 8.14, at 8-123.
- 169 360 F.2d 715 (2d Cir. 1966).
- 170 2360 F.2d at 719 (quoting United States ex rel. Kaloudis v. Shaughnessy, 180 F.2d 489, 491 (2d Cir. 1950)); see also Bertrand v. Sava, 684 F.2d 204, 212 (2d Cir. 1982) (standard adopted in challenge of denial of parole to Haitians); Conceiro v. Marks, 360 F. Supp. 454, 457 (S.D.N.Y. 1973) (standard applied to district director's denial of parole to an excludable political asylum applicant). Other courts have articulated similar standards in other immigration cases. See, e.g., Osuchukwu v. INS, 744 F.2d 1136, 1142 (5th Cir. 1984):

It is our duty to allow decision [sic] to be made by the Attorney General's delegate, even a decision that we deem in error, so long as it is not capricious, racially invidious, utterly without foundation in the evidence, or otherwise so aberrational that it is arbitrary rather than the result of any perceptible rational approach.

See also Sang Seup Shin v. INS, 750 F.2d 122, 125, 127 (D.C. Cir. 1984) (citations and footnote omitted): Broad as the [Bureau of Immigration Appeals'] discretion is, however, that tribunal may not act arbitrarily or irrationally. It may not proceed at whim, shedding its grace unevenly from case to case. It must explain departures from settled policies . . . and it may not unaccountably disregard on one day considerations it held relevant on another day. . . . What determines rights in one case the Board may not ignore in the next. Discretion does not mean license.

- 171 Atchison, T. & S.F. Ry. v. Wichita Bd. of Trade, 412 U.S. 800, 808 (1973) (ICC departures from settled precedent regarding rate increases) (emphasis added): The agency may flatly repudiate [prior] norms, deciding, for example, that changed circumstances mean that they are no longer required in order to effectuate congressional policy. Or it may narrow the zone in which some rule will be applied, because it appears that a more discriminating invocation of the rule will best serve congressional policy. Or it may find that, although the rule in general serves useful purposes, peculiarities of the case before it suggests that the rule not be applied in that case. Whatever the ground for the departure from prior norms, however, it must be clearly set forth so that the reviewing court may understand the basis of the agency's action and so may judge the consistency of that action with the agency's mandate.
- 172 Creater Boston Television Corp. v. FCC, 444 F.2d 841, 852 (D.C. Cir. 1970), cert. denied, 403 U.S. 923 (1971) (footnotes omitted). This view has been consistently adopted by the courts. See, e.g., Atchison, T. & S.F. Ry. v. Wichita Bd. of Trade, 412 U.S. 800, 808 (1973) (agency has a 'duty to explain its departure from prior norms'); Greyhound Corp. v. ICC, 551 F.2d 414, 416 (D.C. Cir. 1977) ('This court emphatically requires that administrative agencies adhere to their own precedents or explain any deviations from them.'); Contractors Transp. Corp. v. United States, 537 F.2d 1160, 1162 (4th Cir. 1976); Frozen Food Express, Inc. v. United States, 535 F.2d 877, 880 (5th Cir. 1976); Columbia Broadcasting Sys. v. FCC, 454 F.2d 1018, 1027 (D.C. Cir. 1971) (agency 'duty bound to justify' facially conflicting decisions).
- 173 See note 152 supra. It is possible, of course, that humanitarian concerns were not the true motivation for the Attorney General's earlier grants of EVD. Nonetheless, he should be held to his own stated reasons and should not be allowed to offer post-hoc rationalizations for his actions. See FTC v. Atlantic Richfield Co., 567 F.2d 96, 100 (D.C. Cir. 1977); see also Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 419 (1971).
- 174 594 F. Supp. at 508; see note 82 supra and accompanying text.
- 175 See notes 140 & 141 supra and accompanying text.
- 176 See generally 2 C. GORDON & H. ROSENFIELD, supra note 1, § 7.1(b)(3), at 7-9 to 7-13.

- See, e.g., Marine Space Enclosures, Inc. v. Federal Maritime Commn., 420 F.2d 577, 585 (D.C. Cir. 1969) (footnote omitted):
  - An agency may modify or even reverse its past policies and announcements, but the confidence of a reviewing court that these adjustments are made in accordance with the requirements of law is not enhanced when the prior precedents are not discussed, the swerves and reversals are not identified, and the entire matter is brushed off once over lightly.
- Cf. Verkuil, supra note 87, at 1152-53 & n.61. This Note does not argue that aliens denied EVD should be allowed to assert due process or equal protection claims. As a discretionary relief for extraordinary situations, EVD does not warrant such constitutional protection. See, e.g., id. at 1178-79. Schuck, in fact, criticized the first Employees Union opinion on precisely this ground, noting that '[t]o surround [EVD] with constitutional constraints not applicable to excludable aliens generally could reduce and perhaps even eliminate its usefulness to the government and to aliens.' Schuck, supra note 87, at 60. But, as Verkuil points out, discretionary decisions, such as EVD, do demand 'some check on the regularity of agency behavior.' Verkuil, supra note 87, at 1179. This need can be accommodated through (1) 'the use of standards and rules to guide agency deciders,' and (2) limited judicial and administrative review. Verkuil, supra note 87, at 1179 n.233.
- 179 See Verkuil, supra note 87, at 1152-53 & n.61.
- 180 *Id.* at 1149.
- 181 *Id.* at 1164.
- 182 *Id.* at 1178.
- See, e.g., Ameeriar v. INS, 438 F.2d 1028 (3d Cir.), cert. dismissed, 404 U.S. 801 (1971); Diver, The Optimal Precision of Administrative Rules, 93 YALE L.J. 65, 92-97 (1983); Roberts, supra note 117, at 158 & n.60; Sofaer, supra note 112, at 1313.
- See e.g., Sofaer, supra note 112, at 1295-97 (constraints on discretion not required where consequences of discretion are unimportant, other controls are present or standards cannot be effectively articulated).
- See Rabin, Job Security and Due Process: Monitoring Administrative Discretion Through a Reasons Requirement, 44 U. CHI. L. REV. 60, 78 (1976).
- See Note, Violations By Agencies of Their Own Regulations, 87 HARV. L. REV. 629, 649 (1974).
- 187 *See id.* at 642.
- 188 *See id.*
- Cf. K. LLEWELLYN, THE BRAMBLE BUSH: ON OUR LAW AND ITS STUDY 43 (1951) ( 'justice demands . . . that like men be treated alike in like conditions'); Ludd, Balanced Understanding, supra note 88, at 22; Developments, supra note 90, at 1297-98.
- 190 *See* Roberts, *supra* note 117, at 152.
- See Verkuil, supra note 87, at 1205.
- See note 88 supra and accompanying text.
- 193 Schuck, *supra* note 87, at 81-82:
  - Few areas of public law are so susceptible to administrative abuse and lawlessness as immigration law. The INS is among the most insular and chronically understaffed of federal agencies; it is vulnerable to manipulation and neglect by Congress and to political reprisals by powerful employer interests opposed to vigorous law enforcement. Aliens, the nominal clients of the system, are politically and economically weak, unfamiliar with legal forms, procedures, and the language, and often reluctant or unable to assert their rights. . . . [A]liens often exist in a kind of social vacuum, outside any structures of institutional, programmatic, administrative, or professional support.
  - INS decisions, moreover, have low visibility; they occur in isolated adjudicatory contexts in which their larger policy consequences, if any, are fragmented and thus difficult to discern or monitor.

- 194 See note 178 supra.
- 195 See Schuck, supra note 87, at 84 (footnote omitted): Where life and liberty interests collide with powerful foreign policy, law enforcement, or other governmental interests, courts should seek relatively flexible solutions, such as 'clear statement' requirements or remands to the agency with instructions to develop new approaches, rather than finding refuge in rigid constitutional rulings.
- 196 See, e.g., Note, supra note 5, at 331-33.
- 197 See notes 16 & 17 supra and accompanying text. INS, Asylum Adjudications, supra note 1, at 69, also made this point: 'Extended voluntary departure sounds like jargon,' said one individual. 'If we have a program where we grant people temporary safe refuge or safe haven for limited periods of time, why not call it that. Safe haven or temporary refuge is something people can understand.'
- 198 INS, Asylum Adjudications, supra note 1, at 72. The INS suggested using either the term 'temporary refuge' or 'safe haven,' but noted that '[t]he term temporary refugee is also used by the State Department for those foreign nationals given refuge in U.S. embassies and consulates overseas.' Id. 'Safe haven' has been proposed by others as well. See, e.g., Refugee Assistance: Hearings on H.R. 3195 Before the Subcomm. on Immigration, Refugees, and International Law of the Comm. on the Judiciary, 98th Cong., 1st Sess. 103 (1983) [hereinafter Refugee Assistance] (statement of T. A. Aleinikoff).
- 199 As Professor Aleinikoff has noted, congressional establishment of EVD would allow the United States to extend temporary protection to persons of humanitarian concern without either distorting the definition of 'refugee' in our laws or increasing the number of aliens who seek permanent residence here. It would provide a statutory basis for administrative practices that have developed without careful thought or congressional oversight. It would foster public debate on issues that have previously been handled out of the public eye. Refugee Assistance, supra note 198, at 103.
- 200 Although EVD has never been defined as applying to nationals of countries suffering from natural disasters, this appears to be a logical extension of EVD's scope. At one time, United States immigration law provided for 'conditional entry' of aliens who had 'been forced to flee their homes as a result of serious natural disasters, such as earthquakes, volcanic eruptions, tidal waves, and in any similar natural catastrophes.' S. REP. NO. 748, 89th Cong., 1st Sess. 16, reprinted in 1965 U.S. CODE CONG. & ADMIN. NEWS 3328, 3335; see Act of Oct. 3, 1965, Pub. L. No. 89-236, § 203(a)(7)(B), 79 STAT. 911, 913 (1965). Aliens were never able to use this provision because of the regulatory and statutory barriers erected. See Note, Victims of Natural Disasters in U.S. Refugee Law and Policy, 1982 MICH. Y.B. INTL. LEGAL STUD. 137, 140. The provision was repealed by the Refugee Act of 1980, § 203(c)(3), leaving the victims of natural disasters without relief under U.S. law. One commentator has suggested that such aliens should be granted refugee status: '[W]hen the disaster constitutes a continuing threat to human life, and aid to the stricken area cannot restore an acceptable standard of living, then the distinction between natural disaster victims and refugees fearing persecution becomes arbitrary and inhumane.' Note, supra, at 137-38. A better solution would be to permit these aliens to enter the United States under a grant of EVD, thus enabling the U.S. government to require them to leave when conditions in the home country have stabilized.
- 201 This was one of the major concerns espoused by the Attorney General and the Secretary of State in connection with the Salvadoran petition for EVD. See, e.g., Letter from William F. Smith, Attorney General, to George P. Shultz, Secretary of State (June 23, 1983), reprinted in Defendants' Memorandum, supra note 6, at Exhibit C ('[B] ased on past experience, the Department has concluded that a grant of EVD is, if not a magnet, at least an inducement to members of the beneficiary nationality to seek to enter the United States by any means, since they can avoid deportation.'); Letter from William F. Smith, Attorney General, to Representative Lawrence S. Smith (July 19, 1983), reprinted in Defendants' Memorandum, supra note 6, at Exhibit D ('[T]here are hundreds of thousands of illegal Salvadoran aliens already in the United States. This is but one facet of the current crisis in which our country is experiencing a floodtide of illegal immigrants. A grant of 'extended voluntary departure' to the Salvadorans undoubtedly would encourage the migration of many more such aliens.').
- 202 See note 16 supra.
- 203 K. DAVIS, DISCRETIONARY JUSTICE 110 (1969).

204 Hotel & Restaurant Employees Union, Local 25 v. Attorney General, 804 F.2d 1256 (D.C. Cir. 1986). 205 804 F.2d at 1272. Although the court of appeals affirmed the district court's grant of summary judgment to the defendants on the EVD issue, it reversed the district court's grant of summary judgment on the asylum issue. The appellate court found that the district court should have stayed the defendants' motion for summary judgment on the asylum issue, pending completion of discovery on the procedures used to process asylum claims. The court remanded the asylum issue to the district court. 804 F.2d at 1270. 206 804 F.2d at 1271. 207 804 F.2d at 1271. 208 804 F.2d at 1271 (citations omitted). 209 804 F.2d at 1271. The court did contemplate a narrow standard of review for EVD decisions. The majority opinion rejected Judge Silberman's concurring argument that EVD is nonreviewable under the APA because EVD is 'committed to agency discretion by law' within the meaning of 5 U.S.C. § 701(a)(2) (1982). Instead, the majority stated: We agree that there is no meaningful standard in this case, but decline to insulate all decisions concerning EVD from review on the far-reaching theory that they are 'committed to agency discretion by law.' That position would effectively insulate all EVD decisions, even ones that may be animated by illegal discriminatory amimus, from review. Instead, . . . decisions made by the Congress or the President in the area of immigration are subject to a narrow standard of review. 804 F.2d at 1272 (citing Fiallo v. Bell, 430 U.S. 787, 796 (1977); Mathews v. Diaz, 426 U.S. 67, 81-82 (1976)). It appears that the court might limit this review to determinations which are not facially legitimate. See 804 F.2d at

1271-72 ('Where Congress has not seen fit to limit the agency's discretion to suspend enforcement of a statute as to

particular groups of aliens, we cannot review facially legitimate exercises of that discretion.').

85 MILR 152

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Cover photo: Fadmou holds her baby girl as she waits in a clinic in Hargeisa, Somalia. © IOM 2020/Muse Mohammed

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WORLD MIGRATION REPORT 2022

# REPORT OVERVIEW: TECHNOLOGICAL, GEOPOLITICAL AND ENVIRONMENTAL TRANSFORMATIONS SHAPING OUR MIGRATION AND MOBILITY FUTURES<sup>1</sup>

# Introduction

The last two years, since the release of the World Migration Report 2020 on 28 November 2019 – around three weeks before COVID-19 was initially detected – have been unlike anything we could have imagined. It has not been business as usual. We therefore cannot make the standard, but nevertheless truthful observations about the tremendous benefits that migration brings to the world, about best practices for safe and well-managed migration, and about how crises combined with misinformation can risk diverting our attention and lead to migration being used as a political weapon.<sup>2</sup> While these observations remain valid, the most severe pandemic in over a century has laid bare some other "home truths". Innovation, ingenuity, skill, compassion, resilience and hope have been witnessed time and again in responding to this global health crisis. Yet there is a sense that some of the core values underpinning a well-functioning system of global governance<sup>3</sup> were at times reduced to rhetoric or fodder for political "announceables". Values such as equality, sustainability, cooperation, collaboration, tolerance and inclusion were, at times, set aside by political and industry leaders under pressure to respond to the pandemic in a hypercompetitive international arena. Unsurprisingly, some of those reflecting on COVID-19 impacts have called for the return to a holistic understanding of the world and the place that humans occupy in it.<sup>4</sup>

It is within this context that this *World Migration Report* focuses on developments in migration over the last two-year period, with an emphasis on providing analysis that takes into account historical and contemporary factors – historical in recognition that migration and displacement occur within broader long-term social, security, political and economic contexts; contemporary in recognition that we are still in many ways grappling with a significant global upheaval caused by a severe pandemic that has tested even the most resilient systems, countries, communities and people. While acknowledging that we will continue to experience the systemic effects of COVID-19 for many years to come, this *World Migration Report 2022* offers an initial exploration of current data and other evidence to answer the key question, "How has COVID-19 altered migration and mobility for people around the world?" Yet it also answers many other questions beyond a COVID-19 focus, including on important topics such as the links between peace and migration, on disinformation on migration, on countering human trafficking in migration pathways and on climate change impacts.

<sup>1</sup> Marie McAuliffe, Head, Migration Research and Publications Division, IOM; Anna Triandafyllidou, Canada Excellence Research Chair in Migration and Integration, Ryerson University.

<sup>2</sup> See Chapter 1 of the World Migration Report 2020 for discussion of these issues.

<sup>3</sup> See, for example, UN, 2015.

<sup>4</sup> Gardini, 2020.

# What has happened in migration?

A great deal has happened in migration in the last two years since the release of the last *World Migration Report* in late 2019. The COVID-19 global pandemic arrived at a time of heightened uncertainty brought about by fundamental changes in technology, adding tremendous complexity and anxiety to a world that was already experiencing significant transformations.<sup>5</sup>

COVID-19 has radically altered mobility around the world, and while there were initial expectations and hope that the pandemic would be limited to 2020, virus strains, waves of infection and vaccination programming issues have seen the pandemic continue through 2021. COVID-19 has become a truly seismic global event, testing the resilience of countries, communities, systems and sectors. By the end of the first year of the pandemic, 116.2 million cases of COVID-19 had been recorded globally, while 2.58 million people had died.<sup>6</sup> In mobility terms, 108,000 international COVID-19-related travel restrictions had been imposed globally.<sup>7</sup> Air passenger numbers dropped by 60 per cent in 2020 (1.8 billion) compared with 2019 (4.5 billion), evidence of the massive decline in mobility globally.<sup>8</sup> Chapter 5 of this report provides analysis of COVID-19 impacts on migration, mobility and migrants during the first year of the pandemic.

The last two years also saw **major migration and displacement events**; events that have caused great hardship and trauma, as well as loss of life. Foremost have been the displacements of millions of people due to conflict (such as within and from the Syrian Arab Republic, Yemen, the Central African Republic, the Democratic Republic of the Congo and South Sudan), or severe economic and political instability (such as that faced by millions of Venezuelans and Afghans). There have also been large-scale displacements triggered by climate- and weather-related disasters in many parts of the world in 2020 and 2021, including in China, the Philippines, Bangladesh, India, the United States of America and Haiti.<sup>9</sup>

We have also seen the scale of international migration increase, although at a reduced rate due to COVID-19. The number of international migrants was estimated to be almost 281 million globally in 2020, with nearly two thirds being labour migrants.<sup>10</sup> This figure remains a very small percentage of the world's population (at 3.6%), meaning that the vast majority of people globally (96.4%) were estimated to be residing in the country in which they were born. However, the estimated number and proportion of international migrants for 2020 was lower, by around 2 million, than they otherwise would have been, due to COVID-19.<sup>11</sup> It is likely that the longer international mobility restrictions remain in place in many parts of the world, the weaker the growth will be in the number of international migrants in future years.

Long-term data on international migration have taught us that **migration is not uniform across the world**, but is shaped by economic, geographic, demographic and other factors, resulting in distinct migration patterns, such as migration "corridors" being developed over many years (see Chapter 2 of this report for details). The largest corridors tend to be from developing countries to larger economies, such as those of the United States, the United Arab Emirates, Saudi Arabia and Germany; large corridors can also reflect protracted conflict and related displacement, such as from the Syrian Arab Republic to Turkey (the second largest corridor in the world). While many long-term corridors are likely to continue to feature in the immediate future, COVID-19 has shed light on the intensification of digitalization and the potential for greater automation of work around the world that is likely to affect key labour migration corridors (see discussion below).

<sup>5</sup> See Chapter 1 of the World Migration Report 2020 for discussion.

<sup>6</sup> WHO, 2021.

<sup>7</sup> IOM, 2021a (as at 8 March 2021).

<sup>8</sup> ICAO, 2021.

<sup>9</sup> IDMC, 2021.

<sup>10</sup> UN DESA, 2021; ILO, 2021.

<sup>11</sup> UN DESA, 2021.

WORLD MIGRATION REPORT 2022 3

# Key migration data at a glance



281 million

international migrants globally in 2020, or 3.6 per cent of the world's population **↑**Up from **272** million (or 3.5%) in 2019

Females <sup>(a)</sup>	<b>135</b> million international female migrants globally in 2020, or 3.5 per cent of the world's female population	◆ Up from <b>130 million</b> (or 3.4%) in 2019
Males <sup>(a)</sup>	<b>146 million</b> international male migrants globally in 2020, or 3.7 per cent of the world's male population	◆ Up from <b>141 million</b> (or 3.6%) in 2019
Labour migrants <sup>(b)</sup>	<b>169 million migrant workers</b> globally in 2019	◆ Up from 164 million globally in 2017
Missing migrants <sup>(c)</sup>	Around <b>3,900 dead and missing</b> globally in 2020	<b>◆</b> Down from almost <b>5,400</b> in 2019



usp 702 billion

in international remittances globally in 2020. Although international remittances declined due to COVID-19, the actual decline (2.4%) was much less than initially projected (20%) Down from
USD **719** billion
in 2019

Low- and middle-income countries<sup>(d)</sup>

USD **540 billion** in international remittances was received by low- and middle-income countries in 2020

Down from
USD **548 billion**in 2019

Report overview: Technological, geopolitical and environmental transformations shaping our migration and mobility futures



89.4 million Up from 84.8 million people were living in in 2019 displacement globally at the end of 2020 (includes refugees,

Refugees <sup>(e)</sup>	<b>26.4 million refugees</b> globally in 2020	◆ Up from 26 million in 2019
Asylum seekers <sup>(e)</sup>	<b>4.1 million asylum seekers</b> globally in 2020	◆ Down from <b>4.2 million</b> in 2019
Displaced Venezuelans <sup>(e)</sup>	<b>3.9 million Venezuelans displaced</b> globally in 2020 (not including those who were refugees or asylum seekers)	◆ Up from <b>3.6 million</b> in 2019
Internally displaced persons (IDPs) <sup>(f)</sup>	<b>55 million IDPs globally in 2020:</b> 48 million due to conflict and violence; 7 million due to disasters	◆ Up from <b>51 million</b> in 2019

asylum seekers, displaced Venezuelans and IDPs)



Mobility was restricted by COVID-19, but internal displacement events increased

COVID-19 restrictions <sup>(g)</sup>	108,000 COVID-19 travel restrictions globally in the first year of the pandemic	New restrictions; nil in 2019.
Global air passengers <sup>(h)</sup>	<b>1.8 billion</b> air passengers globally in 2020 (international and domestic passengers)	<ul><li>◆ Major decline from</li><li>4.5 billion in 2019</li></ul>
Internal displacement events (disaster) <sup>(f)</sup>	Internal disaster displacement events were 30.7 million globally in 2020	★ Significantly up from 24.9 million in 2019
Internal displacement events (conflict) <sup>(f)</sup>	Internal conflict and violence displacement events were <b>9.8 million</b> globally in 2020	Up from <b>8.6 million</b> in 2019

Note: See Chapter 2 for elaboration and discussion.

Sources: (a) UN DESA, 2021; (b) ILO, 2021; (c) IOM, n.d.a; (d) Ratha et al., 2021; (e) UNHCR, 2021; (f) IDMC, 2021; (g) IOM, 2021a; (h) ICAO, 2021.

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WORLD MIGRATION REPORT 2022 5

# Technological, geopolitical and environmental transformations shaping migration and mobility

The unprecedented pace of change during recent years in geopolitical, environmental and technological spheres has led some analysts and commentators to coin or use phrases such as the "age of accelerations", 12 the "fourth industrial revolution" and the "age of change". 14 More recently, COVID-19 has amplified the sense of uncertainty brought about during momentous change, while also physically grounding much of the world for extended periods of time. The pandemic has required resilience, while also offering the opportunity to reflect on our collective futures.

Similar to other international phenomena, migration has historically been affected by seismic geopolitical events, such as the two world wars, the Cold War, and large terrorist attacks (such as 9/11), which can mark "turning points" in migration governance, as well as in broader discourse and sentiment.<sup>15</sup> The COVID-19 pandemic is the latest seismic geopolitical event, stemming from a global health emergency and, while by no means over, it has already had profound impacts on migration and mobility globally. Existing knowledge, evidence and analyses allow us to place new information on COVID-19 within a frame of reference as new data come to light. Rather than looking only at the here and now, we need to be understanding change in terms of longer-term migration patterns and processes. The significance and implications of COVID-19 can only be sufficiently understood and articulated when contextualized and rooted in current knowledge of migration.<sup>16</sup>

It is also important to place migration and mobility within broader systemic change processes that act to determine, shape and impede responses by governments (at different levels) and non-State actors (e.g. civil society, industry, citizens). Key technological, geopolitical and environmental transformations are particularly relevant and help us to understand better the strategic issues shaping the context in which people migrate, States formulate and implement policy, and a wide range of State and non-State actors collaborate and cooperate on migration and mobility research, policy and practice.

## Technological transformations

Technological advances since 2005 resulting in the so-called "fourth industrial revolution" are profoundly changing how social, political and economic systems operate globally.<sup>17</sup> We have been witnessing the rising power of "big tech", the increasing production capability for self-publishing of misinformation and disinformation, the race by businesses to "digitalize or perish", the massive increase in data being produced (mainly through user-generated interactions) resulting in increasing "datafication" of human interactions, and the rapid development and roll-out of artificial intelligence (AI) capabilities within business and governments sectors.<sup>18</sup>

Digital technology is becoming increasingly crucial throughout migration. People are able to gather information and advice in real time during migration journeys, an issue that has raised interest and, at times, concern. The use of apps to share information and connect geographically dispersed groups has raised valid questions concerning the extent

- 12 Friedman, 2016.
- 13 Schwab, 2016.
- 14 Mauldin, 2018.
- 15 Faist, 2004; McAuliffe and Goossens, 2018; Newland et al., 2019.
- 16 McAuliffe et al., 2020.
- 17 Friedman, 2016; Schwab, 2016; Triandafyllidou, 2018.
- 18 Desjardins, 2019; Hirsh-Pasek et al., 2018; McAuliffe, 2021; Skog et al., 2018; Zuboff, 2019.

6

to which digital technology has been used to support irregular migration, as well as to enable migrants to avoid abusive and exploitative migrant smugglers and human traffickers.<sup>19</sup> Migrants have also developed applications to support better integration in receiving countries, while maintaining social links and financial support to their families and societies back home, including through the increasing prevalence of "mobile money" apps.<sup>20</sup> More recently, we have seen migrants develop online chatbots using machine-learning technologies to provide psychological support, as well as to help navigate complex migration policy and visa processing requirements, although digital capture in various migration systems of an increasing amount of personal information is raising concerns about privacy and other human rights issues (see Chapter 11 of this report).

Other connections between migration and technology are also emerging in migration debates. As artificial intelligence technologies are progressively taken up in key sectors, their broader consequences for migrant worker demand and domestic labour markets are areas of intense focus for policymakers and businesses in both origin and receiving countries.<sup>21</sup> Recent discussions have also turned to blockchain technology and its consequences for migration, especially for international remittances, but also for digital identities and global mobility.<sup>22</sup> Social media technology is also increasingly impacting the politics of migration, with a surge of far-right activism on social media platforms seeking to influence public debates and ultimately political decisions (see Chapter 8 of this report).

Profound technological change was deepening before COVID-19, but has significantly intensified during the pandemic, meaning that deep digitalization of an already digitalizing world will be one of the most significant long-term effects of COVID-19. Shaping migration and mobility systems to reduce the impacts of inequality in a world that is suffering multiple "digital divides" will be particularly important in ensuring implementation of the Sustainable Development Goals (SDGs) and other multilateral agreements.

# Geopolitical transformations

Increased competition between States is resulting in heightened geopolitical tension and risking the erosion of multilateral cooperation. Economic, political and military power has radically shifted in the last two decades, with power now more evenly distributed in the international system.<sup>24</sup> As a result, there is rising geopolitical competition, especially among global powers, often played out via proxies. The environment of intensifying competition between key States – and involving a larger number of States – is undermining international cooperation through multilateral mechanisms, such as those of the United Nations.<sup>25</sup> We are living in a period in which the core values underpinning global governance are being challenged. The values of equity, accountability, impartiality, fairness, justice and probity are being actively undermined, as some political leaders disregard common interest in preference for personal interest – even if it corrodes laws, processes and institutions that have, overall, sought to advance whole nations and peoples, without excluding or expelling some because of their inherent characteristics or beliefs.<sup>26</sup> Ongoing and systematic corrosion, as we have witnessed throughout history, can extend to attacks on human rights and ultimately on groups of people within societies.<sup>27</sup>

- 19 McAuliffe, 2016; Sanchez, 2018.
- 20 Kitimbo, 2021.
- 21 Hertog, 2019; McAuliffe, 2018.
- 22 Latonero et al., 2019; Juskalian, 2018.
- 23 "Digital divides" refers to unequal access of digital technology along economic, geographic, demographic and gender lines. See ITU, 2020.
- 24 Menon, 2015.
- 25 Natalegawa, 2020.
- 26 Fotaki, 2014.
- 27 Rawnsley, 2018.

WORLD MIGRATION REPORT 2022 7

In rebalancing the geopolitical debate and arguing for the profound benefits of the multilateral system, many States and the United Nations have actively progressed a number of key initiatives to deliver improved conditions for communities globally, most especially for those most in need. Despite the challenges of a geopolitically charged competition, some progress has been made towards achieving the SDGs,<sup>28</sup> as well as on the specific issues of migration and displacement via the two Global Compacts for migration and on refugees.<sup>29</sup> On the eve of the 2022 International Migration Review Forum – the primary intergovernmental platform on the implementation of the Global Compact for Migration, including as it relates to the SDGs – preparations are well under way, with a series of regional review processes having already been finalized across 2020 and 2021.<sup>30</sup> A rallying cry has also been made recently by the United Nations Secretary-General in his 2021 report *Our Common Agenda* on bolstering support for multilateralism in an increasingly complex, competitive and uncertain world.<sup>31</sup> *Our Common Agenda* outlines the United Nations' actions that are designed to strengthen and accelerate multilateral agreements (including the SDGs) and make a tangible, positive difference in people's lives around the world.

# Environmental transformations

The intensification of ecologically negative human activity is resulting in overconsumption and overproduction linked to unsustainable economic growth, resource depletion and biodiversity collapse, as well as ongoing climate change. Broadly grouped under the heading of "human supremacy", there is growing recognition of the extremely negative consequences of human activities that are not preserving the planet's ecological systems. In several key areas, analysts report that the world is at or nearing "breaking point", including on climate change, biodiversity collapse and mass extinction of thousands of species, 32 while pollution is at record levels, altering ecosystems globally. 33

COVID-19 has dampened human activity in key spheres (e.g. transportation/travel, construction, hospitality) enabling a mini environmental recovery,<sup>34</sup> as well as a space to reflect on the ability of humans to achieve extraordinary things during times of crisis. However, there is a strong sense that this is merely a pause and that human activity will rebound once the pandemic is over, wiping out the pandemic-related benefits.<sup>35</sup> The implications for migration and displacement are significant, as people increasingly turn to internal and international migration as a means of adaptation to environmental impacts (see Chapter 9 of the *World Migration Report 2020*), or face displacement from their homes and communities due to slow-onset impacts of climate change (see Chapter 9 of this report) or experience displacement as a result of acute disaster events (see Chapters 2 and 3 of this report).

<sup>28</sup> UN, 2021a. This 2021 progress report documents SDG progress, but also highlights how COVID-19 has resulted in major setbacks.

<sup>29</sup> Global Compact for Safe, Orderly and Regular Migration; Global Compact on Refugees.

<sup>30</sup> UNNM, 2021.

<sup>31</sup> UN, 2021b.

<sup>32</sup> UNEP, 2020a.

<sup>33</sup> UNEP, 2020b.

<sup>34</sup> Arora et al., 2020.

<sup>35</sup> Freire-González and Vivanco, 2020.

# Through the years: IOM marks its 70th anniversary

The year 2021 marks the 70th anniversary of IOM, providing the opportunity to reflect on the Organization and its work, especially since 2016 when it entered into the United Nations system as a related agency. IOM is the leading intergovernmental organization promoting (since 1951) humane and orderly migration for the benefit of all, with 174 Member States and a presence in over 100 countries. Initially established as the Provisional Intergovernmental Committee for the Movement of Migrants from Europe (PICMME) in 1951, its role was carved out of the chaos and displacement of Western Europe following the Second World War (see text box below on IOM's early years).

# IOM in its early years

Mandated to help European governments to identify resettlement countries for the estimated 11 million people uprooted by the Second World War, IOM (or PICMME, as it was known then) arranged transport for nearly a million migrants during the 1950s.

A succession of name changes from PICMME to the Intergovernmental Committee for European Migration (ICEM) in 1952, to the Intergovernmental Committee for Migration (ICM) in 1980 to the International Organization for Migration (IOM) in 1989, reflects the Organization's transition over the course of half a century from logistics agency to migration agency.

While IOM's history tracks the human-induced and natural disasters of the past half century – Hungary 1956, Czechoslovakia 1968, Chile 1973, the Vietnamese boat people 1975, Kuwait 1990 and the Asian tsunami and Pakistan earthquake of 2004/2005 – its credo that humane and orderly migration benefits migrants and society has steadily gained international acceptance.

From its roots as an operational logistics agency, it has broadened its scope to become the leading international agency working with governments and civil society to advance the understanding of migration issues, encourage social and economic development through migration, and uphold the human dignity and well-being of migrants.

Source: IOM, 2021b.

Over time, IOM's role and responsibilities have expanded considerably in line with the growing salience of migration as a key issue in governance at the international, regional, national and subnational levels.<sup>36</sup> What started as a focus on logistics in support of resettling people displaced by conflict has expanded to cover a wide range issues, as outlined in IOM's Constitution and as shown in Table 1 below.<sup>37</sup> Further information on how IOM has evolved as an organization, especially since 2016, is in Appendix A.<sup>38</sup>

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8

<sup>36</sup> Martin, 2014.

<sup>37</sup> IOM, 2020a.

<sup>38</sup> Note that at the time of writing IOM's Headquarters in Geneva was undergoing a restructure. For information about IOM's organizational structure, please visit www.iom.int/.

WORLD MIGRATION REPORT 2022 9

Table 1. Key facts and figures on IOM (1951, 2016 and 2021)

	1951	2016	2021
Number of Member States	23*	166	174
Number of Observer States	_	6	8
Number of field locations worldwide	18**	408	450**
Number of staff (excluding consultants)	352**	10 184	16 257**
Number of nationalities represented in staff	19**	163	172**
Breakdown between female $(Q)$ and male $(Q)$ staff	_	4 764 ♀ and 5 420 ♂ (47% ♀ and 53% ♂)	7 640 ♀ and 8 614 ♂** (47% ♀ and 53% ♂)**
Total combined revenue for the year (i.e. assessed and voluntary contributions)	USD 26.1 million**	USD 1 615.6 million	USD 2 182.7 million**

Sources: Progress Report of the Director General covering the period 1 June 1952 to 31 August 1952, PIC/70, 18 September 1952; Financial Statements, including report of the external auditors, covering the period 1 February to 31 December 1952, MC/8, 27 March 1953; Financial Report for the Year Ended 31 December 2016, C/108/3, 18 May 2017; IOM Snapshot 2021; Observer States, as of April 2021; Financial Report for the Year Ended 31 December 2020, C/112/3, 31 May 2021; and Annual Report for 2020, C/112/INF/1, 25 June 2021.

As can be seen from Table 1, IOM's presence around the world has grown over time, in part a reflection of the increased focus on migration governance, but also due to the unfortunate reality concerning the growth in internal displacement and the humanitarian and other support needed by some migrant populations. As outlined in Chapters 2 and 3 of this report, the long-term trends regarding migration and displacement vary according to a range of factors, including geography. IOM's regional offices therefore often reflect the regional dynamics associated with migration and displacement trends, and events over time. What this means in practice is that while the United Nations refers to six geographic regions (see Appendix A in Chapter 3 for regional compositions), IOM has nine geographic regions: East and Horn of Africa; West and Central Africa; Southern Africa; Middle East and North Africa; Asia and the Pacific; South-Eastern Europe, Eastern Europe and Central Asia; European Economic Area, the European Union and NATO; South America; Central America, North America and the Caribbean.

The core of the work in all of the regional offices (and Headquarters) reflects IOM's Strategic Vision,<sup>39</sup> adopted in 2019, and its Constitution, with particular reference to the principle that humane and orderly migration benefits migrants and society. As an intergovernmental organization, IOM acts with its partners in the international community to: assist in the meeting of operational challenges of migration; advance understanding of migration issues; encourage social and economic development through migration; and uphold the human dignity and well-being of migrants. The precise activities involved in fulfilling its mandate at the regional level does, however, reflect the specific needs and migration realities on the ground, as highlighted in Appendix B.

Note: - means data for that year are not available.

<sup>\*</sup> This corresponds to the number of participating States prior to the entry into force of the Constitution on 30 April 1954.

<sup>\*\*</sup> Figures in the 1951 column marked with a double asterisk are based on the year 1952. Figures in the 2021 column marked with a double asterisk are as of 31 December 2020.

# The World Migration Report series

The first world migration report was published 22 years ago, initially as a one-off report designed to increase the understanding of migration by policymakers and the general public. It was conceived at a time when the effects of globalization were being felt in many parts of the world and in a multitude of ways. Indeed, the first world migration report states that part of its genesis was due to the effects of globalization on migration patterns, and that the report therefore "looks at the increasingly global economy which has led to an unprecedented influx of newcomers in many countries...". The report highlighted the fact that, despite being an "age-old phenomenon", migration was accelerating as part of broader globalization transformations of economic and trade processes that were enabling greater movement of labour, as well as goods and capital.

Table 2 below provides a summary of key statistics reported in the first edition (*World Migration Report 2000*), as compared to this current edition. It shows that while some aspects have stayed fairly constant – the proportion of female international migrants, as well as the overall proportion of the world's population who were migrants – other aspects have changed dramatically. International remittances, for example, have grown from an estimated USD 128 billion to USD 702 billion, underscoring the salience of international migration as a driver of development. It is unsurprising then that the International Organization for Migration itself has grown in size, with a significant increase in membership over the last two decades, up from 76 to its current membership of 174 States. Also of note in Table 2 is the rise in international migrants globally (up by about 87%) as well as of refugees (up by about 89%) and internally displaced persons (up by about 160%), all the while remaining very small proportions of the world's population.

Table 2. Key facts and figures from World Migration Reports 2000 and 2022

	2000	2022
Estimated number of international migrants	173 million	281 million
Estimated proportion of world population who are migrants	2.8%	3.6%
Estimated proportion of female international migrants	49.4%	48.0%
Estimated proportion of international migrants who are children	16.0%	14.6%
Region with the highest proportion of international migrants	Oceania	Oceania
Country with the highest proportion of international migrants	United Arab Emirates	United Arab Emirates
Number of migrant workers	_	169 million
Global international remittances (USD)	128 billion	702 billion
Number of refugees	14 million	26.4 million
Number of internally displaced persons	21 million	55 million

Sources: See IOM, 2000 and the present edition of the report for sources (Chapter 2).

Notes: The dates of the data estimates in the table may be different to the report publishing date (refer to the reports for more detail on dates of estimates); refer to Chapter 3 of this report for regional breakdowns. Data for 2000 may differ to those originally published due to a standard practice of revising historical estimates at the time of each new dataset release. See, for example, UN DESA, 2021. For the purpose of this table, children refers to those aged 19 years or less.

WORLD MIGRATION REPORT 2022

The World Migration Report 2000's contribution to migration policy as well as migration studies was timely, and its success heralded the World Migration Report series. Since 2000, 11 world migration reports have been produced by IOM, and the report continues to focus on making a relevant, sound and evidence-based contribution that increases the understanding of migration by policymakers, practitioners, researchers and the general public. To support this objective, the series was refined in 2016, moving away from a single theme for each edition to a global reference report for a wider audience. Each edition now has two parts comprising:

- Part I: Key data and information on migration and migrants;
- Part II: Balanced, evidence-based analysis of complex and emerging migration issues.

# New digital tools through expert collaboration

The World Migration Report series now incorporates a range of digital tools tailored for use in various settings. The tools have been developed in partnerships with some of the world's leading experts in migration data analysis, data visualization, education and the science–policy interface.

The new World Migration Report interactive data visualizations were developed in recognition of the need to deliver outputs in a wide range of formats for expanded accessibility and utility. Launched in May 2021, the interactive data visualizations allow users to both read the "headline" summaries on long-term trends, while also interacting with data points to explore specific time periods, corridors or countries. The new interactive format has become the centrepiece of the *World Migration Report* online platform, which was awarded gold for the first time at the 2021 International Annual Report Design Awards.<sup>41</sup> Additional tools for people working in migration and learning about migration, such as the educators' toolkit and the forthcoming officials' toolkit, demonstrate the growing salience of migration as well as the utility of the report.<sup>42</sup> IOM partners with an extensive range of experts in developing and delivering both the report and the related tools in a wide variety of languages to increase local use.<sup>43</sup>

# World Migration Report 2022

This edition builds on the previous two reports (2018 and 2020 editions) by providing updated migration statistics at the global and regional levels, as well as descriptive analysis of complex migration issues.

Part I, on "key data and information on migration", includes separate chapters on global migration trends and patterns; regional dimensions and developments; and a discussion of recent contributions to migration research and analysis by the United Nations system, including IOM. These three chapters have been produced institutionally by IOM, drawing primarily on analyses by IOM experts, practitioners and officials around the world, based on data from a wide range of relevant organizations. The eight chapters in Part II are authored by applied and academic researchers working on migration, including IOM researchers. They cover a range of "complex and emerging migration issues" including:

- COVID-19 impacts on migration, mobility and migrants;
- · peace and security as drivers of development and safe migration;

<sup>41</sup> IADA, 2021.

<sup>42</sup> See https://worldmigrationreport.iom.int/about.

<sup>43</sup> See the "partners" page on the World Migration Report website (https://worldmigrationreport.iom.int/about), which includes many academic institutions, as well as leading policy think tanks and education organizations.

- 12
- · migration as a stepladder of opportunity;
- · disinformation about migration;
- migration and slow-onset climate change;
- · human trafficking in migration pathways;
- · artificial intelligence and migration; and
- · migrants' contributions globally.

While the choice of these topics is necessarily selective and subjective, all the chapters in Part II of this report are directly relevant to some of the most prominent and important debates about migration in the world today. Many of these topics lie at the heart of the conundrums that face policymakers as they seek to formulate effective, proportionate and constructive responses to complex public policy issues related to migration. Accordingly, the chapters aim to inform current and future policy deliberations and discussions by providing a clear identification of the key issues, a critical overview of relevant research and analysis, and a discussion of the implications for future research and policymaking. The chapters are not meant to be prescriptive, in the sense of advocating particular policy "solutions" — especially as the immediate context is an important determinant of policy settings — but to be informative and helpful in what can be highly contested debates.

# Part I: Key data and information on migration and migrants

Chapter 2 provides an overview of global data and trends on international migrants (stocks) and international migration (flows). It also provides a discussion of particular migrant groups – namely, migrant workers, refugees, asylum seekers and internally displaced persons – as well as of international remittances. In addition, the chapter refers to the existing body of IOM programmatic data, particularly on missing migrants, assisted voluntary returns and reintegration, resettlement, and displacement tracking. While these data are generally not global or representative, they can provide insights into changes that have occurred in relevant IOM programming and operations globally.

Following the global overview, Chapter 3 provides a discussion of key regional dimensions of, and developments in, migration. The discussion focuses on six world regions as identified by the United Nations: Africa, Asia, Europe, Latin America and the Caribbean, Northern America, and Oceania. For each of these regions, the analysis includes: (a) an overview and brief discussion of key population-related statistics; and (b) succinct descriptions of "key features and developments" in migration in the region, based on a wide range of data, information and analyses, including from international organizations, researchers and analysts. To account for the diversity of migration patterns, trends and issues within each of the six regions, along with descriptive narratives of "key features and recent developments", are presented at the subregional level.

There is a substantial amount of research and analysis on migration that is being undertaken and published by a range of actors such as academics, governments, intergovernmental organizations and think tanks. Chapter 4 provides a broad overview of contributions by the United Nations system, including the United Nations Network on Migration (UNNM) as part of supporting the ongoing implementation of the Global Compact for Safe, Orderly and Regular Migration, the Global Compact on Refugees and the Sustainable Development Goals.

WORLD MIGRATION REPORT 2022

# Part II: Complex and Emerging Migration Issues

Chapter 5 – The Great Disrupter: COVID-19's impact on migration, mobility and migrants globally



- This chapter provides an analysis of the impacts of the pandemic on migration and mobility, with particular reference to migrants' immobility and vulnerabilities. It focuses on the first year of COVID-19.
- For people who had migrated, been displaced and/or were part of a highly mobile group prior to COVID-19, the likelihood of having been directly affected by the pandemic is especially high. Aside from health-related impacts, many became trapped in immobility and unemployed, without income support or other social protection. COVID-19 led to large-scale stranded migrant populations, with some experiencing destitution, detention and abuse.
- COVID-19 highlighted that widely accepted norms previously considered to be cornerstones of international mobility were quickly set aside in the face of the pandemic. The pandemic also pointed to pervasive inequalities deeply rooted in modern-day societies around the world, while also demonstrating that migrant workers and diaspora are frontline workers not only in essential occupations, but also as agents of global human development as remitters.

## Chapter 6 – Peace and security as drivers of stability, development and safe migration

- This chapter draws upon existing evidence to explore the interaction between conflict, instability and insecurity; development; and migration, showing that instability or conflict feed negatively on development and hence drive displacement, asylum-seeking and unsafe migration.
- The chapter also goes beyond these well-documented links to show how migration can contribute to stability and development and thus mitigate the conditions that lead to irregular migration and displacement.
- It highlights some of the pragmatic peacebuilding initiatives, such as
  community stabilization, that have proven key within the context
  of migration and displacement to building and sustaining peace
  at a local level. It also shows how migrants, through a range of
  activities, contribute to peacebuilding. They do this by advocating
  for peace, through mediation, building public service institutions,
  and supporting their families and communities through remittances.







- This chapter examines the key questions of "who migrates internationally and where do they go?" It presents analysis of a range of statistical data and draws upon some of the existing body of research on migration determinants and decision-making.
- Analysis of international migrant stock and human development index data show that between 1995 and 2020, migration from lowand medium-development countries increased, but only slightly, reconfirming existing macroeconomic analyses which show that international migration from low-income countries has historically been limited.
- However, contrary to previous understandings of international migration, the analysis indicates that there has been a "polarizing" effect, with migration activity increasingly being associated with highly developed countries. This raises the key issue of migration aspirations held by potential migrants from developing countries around the world who may wish to realize opportunities through international migration, but are unable to do so as legal pathways are unavailable to them.

Chapter 8 – Disinformation about migration: An age-old issue with new tech dimensions

- This chapter examines the factors shaping disinformation about migration in terms of society, politics, media and technology. It outlines best practices in building public resilience to disinformation and the major insights from current research, with reference to major gaps in our understanding of disinformation and the current barriers to advancing this work.
- The chapter highlights evidence and practical examples from around the world and from a variety of contexts. It also identifies recommendations and implications for policymakers and other stakeholders seeking to counteract disinformation generally and about migration specifically.



## Chapter 9 - Migration and slow-onset impacts of climate change: Taking stock and taking action



- This chapter focuses on migration in the context of the slow-onset impacts of climate change, an area where policy and knowledge gaps remain. It presents some of the key challenges associated with understanding and taking action on slow-onset climate impacts and migration issues, and explores how migration policy and practice can play a role in responding to some of the most pressing challenges.
- Looking ahead at a future in which slow-onset climate events are expected to worsen, appropriate migration management policies and practices can and should be part of the solution. Recent examples of migration policy initiatives that address climate impacts on migration, including slow-onset dimensions, are outlined in the chapter.
- At the global level, policy discussions have identified some entry points where migration policymakers could be instrumental in promoting positive changes, notably in terms of facilitating migration in the context of slow-onset climate events, and there has been growing interest among both developed and developing States in discussing migration linked to climate impacts in policy terms.

#### Chapter 10 – Human trafficking in migration pathways: Trends, challenges and new forms of cooperation

- This chapter provides an overview of current trafficking trends and patterns, looking at the available data on migrant victims of human trafficking and traffickers. It explores current challenges and promising avenues for the prevention of trafficking of migrants, including prosecuting traffickers, protecting victims and cooperating in counter-trafficking efforts.
- There is widespread global consensus on the urgent need to prevent and combat human trafficking in migration pathways, with few other migration-related issues having attained as much agreement within the international community. However, there is less consensus on how to achieve this in practice, and there remains a shortfall in political will to introduce effective policies to that end. The chapter offers insights in this area across several domains.



## Chapter 11 – Artificial intelligence, migration and mobility: Implications for policy and practice



- This chapter examines the implications of AI for policy and practice
  in the context of migration and mobility through the prism of the
  existing international human rights framework of rules, standards and
  principles. This is important because of the potential for human rights
  to be eroded or bolstered as a result of the design, development,
  implementation and expansion of AI technologies around the world.
- The use of Al throughout the "migration cycle" is examined, with reflections on key strategic challenges and opportunities in this important area of new technology, including as it relates to the "future of work" and long-term migration trends.
- While Al can certainly bring about a series of advantages for policy and practice, there are a range of risks to State and non-State actors (including migrants) that need to be carefully managed, especially from regulatory and human rights perspectives.

Chapter 12 – Reflections on migrants' contributions in an era of increasing disruption and disinformation – "REPEAT"

- This chapter first appeared in the World Migration Report 2020. The
  research for this chapter inspired us to delve deeper into the topic
  of disinformation, resulting in Chapter 8 on disinformation about
  migration (in this volume).
- The last two years, however, have shown us that the issue has not abated. In fact, with COVID-19 disinformation, the massive challenges concerning balanced and accurate accounts of migrants' contributions have only become worse. So, here it is again, to remind us of the importance of the topic and so additional readers can draw upon its contents.

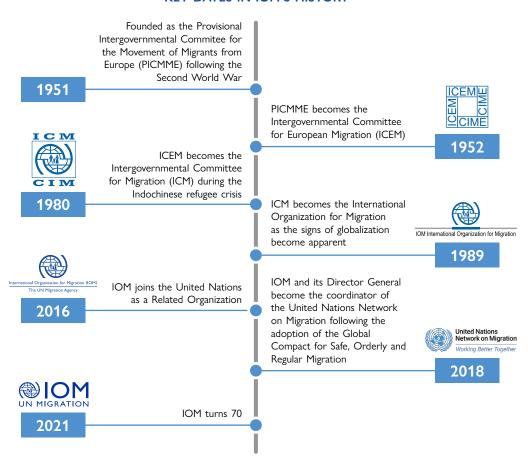


Overall, this world migration report has been produced to help deepen our collective understanding of the various manifestations and complexities of migration in the face of systemic and accelerated change. We hope that all readers are able to learn something new from this edition, as well as to draw on its contents as they undertake their work, study or other activities.

## Appendix A. The International Organization for Migration: 70th anniversary

The year 2021 marks the 70th anniversary of IOM, which was established as a committee to work on resettling people displaced by the Second World War. After more than 65 years of operations, in 2016 IOM formally entered into the United Nations system as a related organization.

#### **KEY DATES IN IOM'S HISTORY**



Since 2016, IOM has further confirmed its status as the leading agency on migration globally, a status it has progressively earned over its 70 years of existence. The different names of the Organization since its inception are a testament to its ability to respond to major geopolitical events and disasters, and to the recognition of migration as a global issue. Upholding the principle that humane and orderly migration benefits migrants and societies, IOM's activities in supporting migrants, communities and diverse stakeholders now extend throughout the migration cycle and to central cross-cutting issues, such as sustainable development, health, and environment and climate change. As IOM's work and role has grown, so too has the number of its Member States, as shown in the figure below.

# The Organization's membership at its...

	70th anniversary in 2021	174	Member States	+83 admissions since 2001	Afghanistan, Antigua and Barbuda, Bahamas, Belarus,	Bosnia and Herzegovina, Botswana, Brazil, <sup>b</sup> Burundi,	Cambodia, Cameroon, Central African Republic,	Chad, China, Comoros, Cook Islands, Cuba, Djibouti,	Dominica, Eritrea, Estonia, Eswatini, Ethiopia, Fiii, Gabon.	Ghana, Grenada, Guyana, Holy	See, Iceland, India, Ireland, Iamaica, Kazakhstan, Kiribati,	Lao People's Democratic	Republic, Lesotho, Libya, Malawi,	Mauritania, Mauritius, Mexico,	Micronesia (Federated States of),	Mozambique, Myanmar, Namibia,	Nauru, Nepal, New Zealand, b	Niger, Nigeria, North Macedonia, Palau, Papua New Guinea.	Republic of Moldova,	Russian Federation, Rwanda,	Saint Vincent and the Grenadines.	Sao Tome and Principe, Samoa,	Seychelles, Solomon Islands,	Suriname, Timor-Leste, Togo,	Tonga, Trinidad and Tobago, Turkey Turkmenistan, Tuvalu	Uzbekistan, Vanuatu, Viet Nam, Zimbabwe	
	50th anniversary in 2001	14 94 94	Member States						+62 admissions since 1981	Albania, Algeria, Angola,	Armenia, Australia, <sup>b</sup> Azerbaijan, Bangladesh, Belize, Benin,	Bulgaria, Burkina Faso,	Câte d'Ivoire Croatis Cachis	Democratic Republic of the	Congo, Egypt, Finland, France, <sup>b</sup>	Guatemala, Guinea,	Guinea-Bissau, Haiti, Hungary,	Iran (Islamic Republic of), Japan, Iordan. Kenya. Kyrgyzstan. Latyia.	Liberia, Lithuania, Madagascar,	Mali, Morocco, Pakistan,	rniippines, Foland, Republic of Korea. Romania.	Senegal, Serbia, Sierra Leone,	Slovakia, Slovenia, South Africa, <sup>b</sup> Sri Lanka, Sudan, Sweden <sup>b</sup>	Tajikistan, Thailand, Tunisia,	Uganda, Ukraine, United Kingdom, <sup>b</sup>	United Republic of Tanzania, Yemen, Zambia	
	30th anniversary in 1981	30	Member States																				+10 admissions since 1961	Cyprus, Dominican Republic,	El Salvador, Honduras, Malta,ª Nicaragua, Peru, Portugal	Uruguay, Venezuela (Bolivarian Republic of) <sup>b</sup>	
membersing at its	10th anniversary in 1961	29	Member States																				+8 admissions since 1954	Bolivia (Plurinational State of),	Ecuador, New Zealand, <sup>a</sup> Panama, Rhodesia and Nyasaland <sup>a</sup>	South Africa, <sup>a</sup> Spain, <sup>a</sup> United Kingdom <sup>a</sup>	
THE OLIGATIONS MEMBERSHIP AT ITS	inception in 1951	16	Founding States*																24 Member States in 1954**	* * * * * * * * * * * * * * * * * * *	Argentina, Australia," Austria, Beloium Brazil ª Canada ª Chile	Colombia, Costa Rica, Denmark,	France, <sup>a</sup> Germany, Greece, Israel,	Italy, Luxembourg, Netherlands,	Switzerland, United States of	America, Uruguay, Venezuela (Bolivarian Republic of) <sup>a</sup>	

The figure uses the official names of countries as at 16 September 2021, with the exception of the Federation of Rhodesia and Nyasaland, which was ended in 1963. Notes:

- Turkey and the United States Refers to States that signed the Resolution adopted on 5 December 1951 that created the Provisional Intergovernmental Committee for the Movement of Migrants from Europe (PICMME). namely: Australia, Austria, Belgium, Pluninational State of Bolivia, Brazil, Canada, Chile, France, Germany, Greece, Italy, Luxembourg, Netherlands, Switzerland, Turkey and the Unit of America. The membership process formally started after the prolongation of PICMME's mandate as the Intergovernmental Committee for European Migration (ICEM) in 1952.
- Refers to States that initially adhered to the Organization prior to the entry into force of ICEM's Constitution on 30 April 1954. While Uruguay was initially considered as a member, it only formally became so upon ratification of the Organization's Constitution in 1965. \*
  - a States that subsequently withdrew from the Organization. b States that were readmitted as members of the Organization.

This map is for illustration purposes only. The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the International Organization for Migration. WORLD MIGRATION REPORT 2022

Since 2016, four major developments have consolidated IOM as the leading global organization on migration.

## 2018 – IOM and its Director General become the coordinator of the United Nations Network on Migration

After supporting States throughout the development process of the Global Compact for Safe, Orderly and Regular Migration, IOM was appointed as the coordinator of the United Nations Network on Migration (UNNM) established in 2018 to assist States in implementing the Global Compact for Migration.<sup>44</sup> IOM's Director General serves in this capacity, which entails the primary responsibility for fostering collaborations among UNNM members on the functioning of the network and action priorities; ensuring the smooth functioning of the network, including by maintaining an effective secretariat hosted in IOM; facilitating regular interactions between the executive committee's principals; briefing the United Nations system and other stakeholders on new developments and achievements; and fundraising for UNNM with the support of the executive committee.<sup>45</sup>

#### 2019 - IOM adopts its Strategic Vision 2019-2023

IOM Strategic Vision was adopted in recognition that IOM's status as the global leader on migration and ongoing emerging challenges in the field of migration requires a strategic approach and planning for the Organization.<sup>46</sup> The Strategic Vision represents IOM's reflection on its needs and priorities, based on landscape assessment of what the next decade will bring. It also sets the direction for the development of the Organization during a five-year period, based on three main pillars and a series of strategic priorities.

## 2020 onwards — IOM supports communities in responding to the COVID-19 pandemic

IOM quickly demonstrated its agility in response to the spread of COVID-19. In February 2020, IOM launched its Strategic Preparedness and Response Plan COVID-19, subsequently updated to reflect the changing operational realities and needs and appealing for a total of USD 618.9 million targeting 140 countries.<sup>47</sup>

In 2021, IOM adopted a new Strategic Response and Recovery Plan COVID-19 for the year 2021, initially appealing for USD 822,868,000 targeting 141 countries.<sup>48</sup> While building on the 2020 plan, the 2021 plan focuses on recovery based on four strategic objectives:

- 1. Ensure continuation of services, mitigate risks and protect people;
- 2. Scale up public health measures and strengthen mobility-sensitive health systems;
- 3. Mitigate socioeconomic impacts of COVID-19, restart human mobility and empower societies; and
- 4. Inform response and recovery efforts and strengthen evidence-based decision-making.

<sup>44</sup> See www.iom.int/gcm-development-process and https://migrationnetwork.un.org/.

<sup>45</sup> See https://migrationnetwork.un.org/coordinator.

<sup>46</sup> See www.iom.int/strategy.

<sup>47</sup> IOM, 2020b.

<sup>48</sup> IOM, 2021c.

# IOM's responses to the COVID-19 pandemic: 2020 highlights

- Over 37 million beneficiaries reached for risk communication and community engagement efforts relating to COVID-19;
- Over 107,000 individuals receiving some return-related assistance, with over 2,600 stranded migrants receiving direct support for safe and dignified return;
- Over 21.8 million non-food item supplies procured and distributed globally;
- More than 19 million people reached with critical water, sanitation and hygiene (WASH) supplies globally, including +5 million in camps and/or camp-like settings;
- More than 2 million people in camps and camp-like settings benefiting from COVID-19-related site upgrades;
- Over 109,000 COVID-19 tests provided by IOM globally; and
- Around 239,000 individuals provided with livelihood support globally.

See IOM's COVID-19 Preparedness and Response: Achievements Report 2020 (IOM, 2020c).

#### 2021 – IOM appoints two new Deputy Directors General



The appointment of two new Deputy Directors General, selected by Director General António Vitorino on 31 May 2021, constituted a major breakthrough in IOM's senior management history. Since its inception in 1951, IOM has been managed by one Director General supported by one Deputy Director General, with a total, over the years, of nine Deputy Directors General. As proposed by the IOM Director General, IOM Member States agreed it was time to strengthen IOM's senior leadership structure through the establishment of two Deputy Director General positions, one focusing on operations and the other on management and reform.<sup>49</sup>

The appointments of Ms Ugochi Florence Daniels as Deputy Director General for Operations and of Ms Amy E. Pope as Deputy Director General for Management and Reform have set a new strategic direction for the Organization, starting with IOM's Headquarters, which is currently being restructured.<sup>50</sup>

<sup>49</sup> See https://governingbodies.iom.int/system/files/en/council/4h\_Special/C-Sp-4-RES-1385%20-%20Strengthening%20the%20senior%20 leadership%20structure%20of%20the%20Organization.pdf.

<sup>50</sup> See www.iom.int/news/iom-announces-appointment-new-deputy-directors-general.

Appendix B. Highlighting the work of IOM's regional offices during the Organization's 70th anniversary<sup>51</sup>

#### AFRICA52

Regional Office for East and Horn of Africa

IOM has been operational in the East and Horn of Africa (EHoA) region since 1985 and its Kenya office was the first in Africa. The IOM Regional Office in Nairobi coordinates IOM activities in 10 countries in the region.<sup>53</sup> IOM's Ethiopia Office doubles as a Special Liaison Office to the African Union and the United Nations Economic Commission for Africa, while IOM's African Capacity-Building Centre is located in the United Republic of Tanzania. IOM works closely with the East African Community (EAC) and the Intergovernmental Authority on Development (IGAD). It has Memorandums of Understanding (MoUs) with both institutions that facilitate the Regional Office's liaison and coordination role to enhance regional cooperation and dialogue on migration. This relationship has enabled IOM to translate political decisions into practical programmatic and policy responses at the regional and national levels. The region hosts several Inter-State Consultation Mechanisms on migration (ISCMs),<sup>54</sup> to which IOM has an observer status and either provides or supports the secretariats.

K	Key facts and figures for EHoA Regional Office Nairobi, 2020					
Number of migrants assisted	1 479 370					
Number of IOM projects	246 active IOM projects by management location and 545 projects by implementation location					
Number of Member States in the region	10					
Number of offices	101					
Number of staff	5 686 <sup>55</sup>					
Number of nationalities represented among staff	28					

<sup>51</sup> Please refer to regional office websites (as provided) for further details, including on regional projects, regional publications and regional data. Please note that data provided in this appendix were from regional offices and subject to their verification processes, not those of the report research team.

<sup>52</sup> IOM regions do not reflect United Nations geographic regions and subregions. See Chapter 3, Appendix A for United Nations regional compositions.

<sup>53</sup> Burundi, Djibouti, Eritrea (pending opening), Ethiopia, Kenya, Rwanda, Somalia, South Sudan, Uganda and the United Republic of Tanzania.

<sup>54</sup> Migration Dialogue for IGAD Region (MID-IGAD); African Union—Horn of Africa Initiative on Human Trafficking and Migrant Smuggling (AU—HoAI); the African, Caribbean and Pacific Group of States—European Union Dialogue on Migration (ACP—EU MD); the Pan-African Forum on Migration (PAFOM); and the Regional Ministerial Forum on Migration for East and Horn of Africa (RMFM), the Migration Dialogue for COMESA (MIDCOM), the Arab Regional Consultative Process on Migration, MID-IGAD, MIDCOM and PAFOM.

<sup>55</sup> Please note that this includes staff, consultants, interns, United Nations Volunteers, etc.

Key areas of work	Emergency and humanitarian responses, refugee resettlement and health assessments; migration, environment and climate change; immigration and border management; migration and health; labour migration; migration and development; diaspora engagement; migrant protection and assistance; counter-trafficking; return and reintegration; and migration governance, policy, data and research.
Key publications	<ul> <li>A Region on the Move report series illustrates the main humanitarian situations and mixed migration flows along the major migration corridors. <sup>56</sup></li> <li>Eastern Route Research series investigates migration drivers, the decision-making process and migration experiences. <sup>57</sup></li> <li>Gendered Patterns of Women and Girls' Migration Along the Eastern Corridor (December 2020). <sup>58</sup></li> <li>Impact Study: Methodological Report. The Methodological Report to Evaluate the Impact of the EU–IOM Joint Initiative for Migrant Protection and Reintegration in the Horn of Africa Region. <sup>59</sup></li> <li>Life Amidst a Pandemic: Hunger, Migration and Displacement in the East and Horn of Africa (June 2021) is a joint IOM and World Food Programme publication analysing how COVID-19 has affected food security, displacement, migration and protection outcomes in the region. <sup>60</sup></li> </ul>
Regional webpage	https://ronairobi.iom.int/
Regional Strategy	East and Horn of Africa Regional Strategy 2020–2024. <sup>61</sup>

#### Key developments in EHoA region since IOM joined the United Nations system

Regional integration: IOM is working with Member States and Regional Economic Communities (RECs) to facilitate mobility and support regional integration, including through programmatic technical guidance.

- (a) Crises increasingly protracted, creating fragility and potential ruptures: In the past 12 months the progress towards peace has been challenged. Most countries in the region continue to be affected by disasters induced by natural hazards, climate change and environmental degradation, as well as desert locust invasion that has affected food security. Accordingly, the East and Horn of Africa region hosted an estimated 6.5 million internally displaced persons (IDPs) and 3.6 million refugees and asylum seekers at the end of 2020.
- (b) Transnational organized crime increasingly entrenched: The greater Horn of Africa is an easy target for organized transnational criminal networks involved in human smuggling, trafficking, illicit money transfers and violent extremism, among other activities. In response to this, IOM is actively supporting Member States in the coordination of real-time information exchanges and intelligence sharing through the promotion and support of the Migration Information and Data Analysis System (MIDAS), an entry and exit system that captures, cross-checks, verifies and stores traveller data, and which contributes to addressing both human trafficking and migrant smuggling in the East and Horn of Africa.

<sup>56</sup> IOM, 2021d.

<sup>57</sup> IOM, 2020d.

<sup>58</sup> IOM, 2020e.

<sup>59</sup> IOM, 2020f.

<sup>60</sup> IOM, 2021e.

<sup>61</sup> IOM, 2020g.

- (c) Persistent vulnerability of migrants in irregular situations: Cross-regional socioeconomic inequalities motivate people to migrate irregularly out of the region, mainly looking for better economic opportunities. In response to this, IOM provides vital assistance to vulnerable and stranded migrants through protection services and lifesaving assistance along the migration routes in the Horn of Africa, with particular attention to victims of trafficking, minors and other migrants in vulnerable situations. In its programming, IOM uses a route-based approach, involving relevant governments and partner organizations in the design and implementation of activities.
- (d) The continuous re-emergence of outbreaks, epidemics, pandemics, zoonotic diseases and other public health threats: The region is characterized by countries with fragile and inadequate health systems, including the human mobility aspects of the public health agenda. The COVID-19 pandemic has further exposed these challenges, leading to the exclusion of migrants from national response plans, leaving them stranded and unable to access testing and essential medical care, or being forcibly returned. In response to this, IOM provides direct assistance to migrants and other vulnerable groups on the move and works closely with other United Nations agencies to strengthen Member States' capacities to address human mobility during outbreaks.

# Highlights: IOM's response to COVID-19 in EHoA Regional Office Nairobi, 2020

**9** countries where IOM implemented COVID-19-related operations.

**USD 21.2 million** spent on COVID-19 activities.

**7,023,392** beneficiaries reached for risk communication and community engagement efforts related to COVID-19.

**6,917** individuals received some return-related assistance.

**472,367** people reached with critical water, sanitation and hygiene (WASH) supplies.

53,067 COVID-19 tests supported.

**8,189** provided with livelihood support.

**Over 1.1 million** individuals in camps or camplike settings benefited from COVID-19-related site upgrades.

**3** countries, Ethiopia, Kenya and Djibouti, were assisted with quarantine management.

In December 2020, IOM EHoA together with ministers of all Member States of the region and the heads of the Intergovernmental Authority on Development (IGAD) and the East African Community (EAC) launched its regional strategy 2020–2024.

In April 2020, IOM EHoA launched its 2020 COVID-19 regional strategic response appeal with a funding need of USD 73.9 million, of which it managed to secure nearly 70 per cent.

Labor migration: The Regional Ministerial Forum on Migration for East and Horn of Africa (RMFM) on "Harmonizing Labour Migration Policies in East and Horn of Africa – A United Approach on Safe, Regular and Humane Labour Migration" was launched during a high-level ministerial conference in Nairobi in January 2021. The RMFM brought together 11 EHoA countries.<sup>62</sup>

Migration, Environment and Climate Change (MECC): The creation and growth of the Regional MECC Division
was achieved through the appointment of a regional thematic specialist in 2018. The MECC portfolio has
since grown significantly, with expanded regional and national networks (governments, United Nations and

others), State-level projects and a regional, multi-agency joint Multi-Partner Trust Fund (MPTF) Migration funded programme.

- Regional Data Hub (RDH) for East and Horn of Africa: Established in early 2018, the RDH supports evidencebased, strategic and policy-level discussion on migration through a combination of initiatives. RDH's published papers have contributed significantly to IOM's capacity to produce knowledge drawn from its rich operational experience.
- Implementation of the EU-IOM Joint Initiative for Migrant Protection and Reintegration in the Khartoum Process Countries in the Horn of Africa: This flagship Assisted Voluntary Return and Reintegration (AVRR) and capacity-building programme is funded by the European Union Trust Fund. Under the programme, IOM's Integrated Approach to Reintegration was rolled out in the Horn of Africa, providing not only economic, but also social and psychosocial reintegration assistance to over 8,500 returnees,<sup>63</sup> as well as host community members, in close coordination with government counterparts and 67 local State and non-State reintegration partners.
- Border management: IOM has undertaken various interventions focused on supporting the East and Horn of Africa region's integration within the domain of digitized border management information systems. This specifically refers to the Migration Information Data Analysis System (MIDAS) for border and data management and through partnership with Interpol with the I-24/7 alert system, which addresses the reduction of the mobility of known and suspected terrorists.
- Health programming has been primarily geared towards responding to emergencies and protracted crises, thus positioning IOM among the front-line health agencies running primary health-care facilities in different settings with outreach interventions, risk communication and community engagement, as well as assisting Member States in enhancing their International Health Regulations capacity at points of entry. The Migration Health Division (MHD) is currently working to move from emergency services to health system development, with a vision to include migrants within national health plans, including preparedness, response and universal health coverage.

## Regional Office for West and Central Africa

The IOM Regional Office for West and Central Africa (WCA) was established in 1998 in Dakar, Senegal, and covers 23 countries. <sup>64</sup> Since its establishment, the Regional Office for WCA has been working with governments and other stakeholders in the West and Central Africa region in the field of migration to address the challenges and opportunities presented by dynamic migratory patterns and trends. IOM's activities have been focused on building links between migration and development; counter-trafficking activities; assisted voluntary return and reintegration support for migrants returning to the region; pursuing robust collective outcomes across the humanitarian–development–peace nexus; building community resilience; improving access to critical health services; supporting the management of communicable diseases; and strengthening capacities in labour migration management and migration policy development.

<sup>63</sup> The total as of 31 December 2020.

<sup>64</sup> Benin, Burkina Faso, Cabo Verde, Cameroon, Central African Republic, Chad, the Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, the Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, the Niger, Nigeria, Sao Tome and Principe, Senegal, Sierra Leone and Togo.

Key facts a	nd figures for the Regional Office for West and Central Africa, 2020
Number of migrants assisted	Reintegration cases in 2020: 22 210
Number of IOM projects	139
Number of Member States in the region	22 (from 23 countries covered)
Number of offices	19 country offices and 44 sub-offices
Number of staff	2 004
Number of nationalities represented among staff	74 (among a total of 2 018 staff)
Key areas of work	Migrant assistance and protection; policy support; border management; emergencies; labour migration and human development; migration and health; and migration, environment and climate change.
Key publications	<ul> <li>West And Central Africa – A Region on the Move: Mobility Trends in West and Central Africa (January – December 2020).<sup>65</sup></li> <li>An Exploratory Study on Labour Recruitment and Migrant Worker Protection Mechanisms in West Africa: The Case of Côte d'Ivoire, the Gambia, Ghana, Nigeria and Senegal.<sup>66</sup></li> <li>Promoting Safe Migration in 2020 West and Central Africa.<sup>67</sup></li> <li>Smuggling of Migrants on the Central Mediterranean Route: Issues, challenges and perspectives.<sup>68</sup></li> <li>Intégration du Lien entre Migration, Environnement et Changement Climatique dans la Planification Locale: Cas des communes de Mané et de Bokin dans les régions du Centre-Nord et du Nord du Burkina Faso.<sup>69</sup></li> </ul>
Regional webpage	https://rodakar.iom.int
Regional Strategy	West and Central Africa Regional Strategy 2020–2024. <sup>70</sup>

<sup>65</sup> IOM, 2021f.

<sup>66</sup> IOM, 2020h.

<sup>67</sup> IOM, n.d.b.

<sup>68</sup> IOM, 2021g.

<sup>69</sup> IOM, 2020i.

<sup>70</sup> IOM, 2020j.

## Key developments in the IOM West and Central Africa region since IOM joined the United Nations system

The West and Central Africa region exhibits varied migration patterns and flows driven by a multitude of interconnected drivers. Intraregional migration is a predominant characteristic across the region, while irregular migration remains prevalent, and instability and conflict continue to precipitate mass displacements within countries and across borders. At the same time, rapid population growth, environmental change, natural resource depletion and an increase in the frequency and intensity of disasters, aggravated by climate change, are accelerating urbanization and spurring migration. The COVID-19 pandemic has provided further evidence of the urgency to enhance cross-border cooperation. Considering this, IOM Regional Office for WCA and the 19 country offices in the region have supported migrants, governments and other stakeholders to work through several programmes towards a migration framework that benefits all.

Knowing that migration and mobility are an important factor in the spread or control of diseases and pandemics, IOM has been actively engaged in preparedness and response to epidemic-prone diseases, including COVID-19, by using its expertise from the strong response to the 2014–2016 Ebola virus disease outbreak in West Africa. During crises, IOM has the lead in the WHO epidemic response pillar that focuses on points of entry. Further, the Regional Office raised awareness on COVID-19. From March 2020 to March 2021, IOM helped with COVID-19 prevention efforts in the region by conducting 5,133 on-the-ground activities and engaging 862,460 people in more than 1,728 communities. In addition, through 751 television airings and 7,452 radio broadcasts, IOM reached a potential audience of more than 19 million people with information on COVID-19.

COVID-19 preventive measures have also highlighted the importance of border management. Porous borders,

# Highlights: IOM's response to COVID-19 in West and Central Africa, 2020

**12 countries** where IOM implemented COVID-19-related operations.

**USD 14.27 million** spent on COVID-19 activities.

**862,460** beneficiaries reached for risk communication and community engagement efforts relating to COVID-19.

**3,364** individuals receiving some return-related assistance.

**23,535** people reached with critical WASH supplies, including masks.

insecurity and governance deficits within several countries continue to present challenges in ensuring safe and orderly migration. IOM has been engaging strongly in single- and multi-country responses to strengthen the presence and capacities of States in border management, especially through the integrated border management approach, to ensure cohesive and rights-based migration governance and management. The Immigration and Border Management portfolio has expanded during the last five years to an overall budget of USD 70 million covering 18 countries in West and Central Africa.

As the protracted crises in the Lake Chad Basin and in the Central African Republic persist and new crises emerge in the Sahel, impacting regional stability in West and Central Africa, IOM has amplified its capacity to respond to the humanitarian needs of the increasing numbers of internally displaced persons, while augmenting its work on prevention, recovery and peacebuilding to support Member States as they cope with the impact of conflict on their communities. In line with its commitment during the World Humanitarian Forum in 2016, IOM's Emergencies and Operations portfolio in West and Central Africa spans the humanitarian—development—peace nexus to include over 135 projects totalling over USD 325.5 million ongoing simultaneously (as of mid-July 2021) to address root causes and effects of conflict throughout the region. IOM's emergency and post-crisis efforts in WCA include sectoral

interventions, such as shelter and non-food Items (NFI); camp management and camp coordination (CCCM); water, sanitation and hygiene (WASH) provision; mental health and psychosocial support (MHPSS); data collection through its well-established Displacement Tracking Matrix (DTM), which includes tools contributing to the creation of an evidence base on displacement figures; IDP needs; sudden emergency event tracking; early warning systems for conflict prevention, including issues related to transhumance mobility and stability in contexts poised for recovery; and prevention, community stabilization, peacebuilding and post-crisis recovery for durable solutions.

An important achievement for the governance and management of migration was the adoption of the Global Compact for Safe, Orderly and Regular Migration, urging for comprehensive legislative and administrative frameworks covering migration. IOM has been supporting Member States in West and Central Africa in adopting comprehensive migration policies, such as Guinea, Senegal, Sierra Leone, the Gambia and Côte d'Ivoire, and in mainstreaming migration in other relevant policy sectors (development, environment, urban policies, etc.) to reduce adverse effects and maximize positive impacts. This is also visible with regard to international environmental migration. While the predominance of internal environmental human mobility should not be overlooked, the major step of having agreed to a set of principles and objectives in the Global Compact for Migration stimulated knowledge production and policy dialogue initiatives on human mobility in the context of climate change and environmental degradation, especially in West Africa. The activation of the thematic working group of the Migration Dialogue for West Africa (MIDWA) on the effects of climate change, land degradation, desertification and environment on migration represents one such promising initiative.

The need to promote safe and informed migration and to protect and assist migrants en route or stranded is more important than ever, as the rates of deaths, exploitation and abuse recorded on the Central Mediterranean migration route are at an all-time high. To improve migrant protection and voluntary return and reintegration along the Central Mediterranean route in Africa, the European Union – through the Emergency Trust Fund for Africa (EUTF) and with contributions from Germany (EUR 48 million) and Italy (EUR 22 million) – in 2016 launched with IOM the Joint Initiative (JI) for Migrant Protection and Reintegration in Africa to strengthen migration governance and respond to the urgent need to protect and save the lives of migrants along the Central Mediterranean migration route. In Central and West Africa, the JI is implemented in 13 countries (Burkina Faso, Cameroon, Chad, Côte d'Ivoire, the Gambia, Ghana, Guinea, Guinea-Bissau, Mali, Mauritania, the Niger, Nigeria and Senegal) through 14 specific actions. It aims to ensure that the migration process is safer, more informed and better governed for both migrants and their home communities and is mobilizing media, public and political support for migrants in the region to promote their protection and assistance.

Last but not least, the Regional Office has contributed to rewrite the narrative on migration in the region through its communications and visibility activities, enhancing public understanding and knowledge of the current migration situation. Highlights include the Migrants as Messengers campaign, working with returnee migrants on peer-to-peer communication;<sup>71</sup> WAKA Well (IOM X West Africa), which applies a communication for development (C4D) approach to empower young people in making informed migration-related decisions;<sup>72</sup> and CinemArena's mobile cinema touring across the region.

<sup>71</sup> IOM, n.d.c.

<sup>72</sup> WAKA Well, n.d.

# Regional Office for Southern Africa

The IOM Regional Office for Southern Africa, based in Pretoria, covers 15 countries in the Southern African region. IOM operates through 5,865 staff members located in 24 offices across the region. The Regional Office provides technical backstopping and programme support to IOM country offices in the Southern African region. The strategic location of the Regional Office in one of the largest diplomatic capitals in the world gives it access to a wide number of partners. All countries in the Southern African region are also IOM Member States. This provides a unique opportunity in terms of applying a comprehensive and systematic approach based on a holistic and timely engagement with national governments that feeds into a solid regional partnership on migration. As the preferred partner of States on migration-related issues, IOM has played an important role over the years by contributing to migration governance and management efforts in the region. Key areas of focus include: (a) advancing migrants' rights; (b) establishment of a regional policy dialogue on migration; (c) development of migrant-friendly policies; (d) facilitation of South–South labour mobility; (e) trade facilitation, human mobility and border management; (f) capacity-building of government and non-governmental actors on migration management; (g) prevention, preparedness response and recovery in migration crises, as well as cross-border and internal humanitarian emergencies; and (h) reduction of HIV, tuberculosis and other communicable diseases in migration-affected communities.

IOM has provided leadership on migration issues by coordinating efforts of various partners at the national and regional levels. As recognized in the 2030 Agenda for Sustainable Development and promoted in the IOM Institutional Strategy on Migration and Sustainable Development, human mobility is inextricably linked with sustainable development. The Sustainable Development Goals (SDGs) – and their commitment to "leave no one behind" and to "reach the furthest behind" – will not be achieved without due consideration of migration. This includes considering the impacts of income inequalities on human mobility dynamics and the ways in which migration and migrants themselves can contribute to reducing inequalities.

Southern Africa is a region historically characterized by dynamic human mobility that contributes to the economies of countries and the livelihoods of communities. Even today, the interwoven solidarity and common vision among Southern African States continues to be the driving force towards regional integration and overall socioeconomic development. In the coming four years, IOM will invest more strategically in the design and implementation of new, innovative and responsive policies and programmes to support Southern African governments in building capacities for effective and rights-based management of migration that contributes to sustainable development outcomes and protects the fundamental rights of migrants.

In addition to the well-established labour migration patterns within the region, major migration routes come into Southern Africa, predominantly constituted by mixed migration flows originating from the Horn of Africa and the Great Lakes region. Addressing these complex movements, which cut across several countries and multiple subregions, requires strong cross-regional partnerships, which IOM will strive to support through existing frameworks for cooperation, including the various State-led consultative processes convened within the region and with neighbouring regions. Some of the world's most hazard-prone countries are situated in the region, with vulnerabilities to a range of hazards, such as droughts, floods, storms, epidemics, landslides, volcanic activity and wildfires, as well as conflict.

28

Key fa	Key facts and figures for the Regional Office for Southern Africa, 2020					
Number of migrants assisted	1 899 (1 469 under the AVRR project)					
Number of IOM projects	<ol> <li>Sexual and Reproductive Health and Rights (SRHR) and HIV Knows No Borders<sup>73</sup></li> <li>Africa Regional Migration Programme (ARMP)<sup>74</sup></li> <li>Southern Africa Migration Management (SAMM) project</li> </ol>					
Number of Member States in the region	15					
Number of offices	24					
Number of staff	969					
Number of nationalities represented among staff	61					
Regional webpage	https://ropretoria.iom.int/					
Regional Strategy	Southern Africa Regional Strategy 2020–2024. <sup>75</sup>					

#### Key developments in Regional Office Pretoria since IOM joined the United Nations system

Since the establishment of the United Nations Network on Migration (UNNM), regional and national structures have been rolled out under the leadership of IOM. As a member of the United Nations Sustainable Development Group (UNSDG), IOM has a clear responsibility to articulate its activities and mandate in relation to the 2030 Agenda, to report on its activities to support Member States in achieving the commitments therein and to contribute to regional discussions on migration and sustainable development. The Regional Office in Pretoria therefore recognizes the need to leverage existing structures of the Regional United Nations Sustainable Development Group (R-UNSDG) to strengthen interagency cooperation on migration for more consolidated support to Member States in the subregion to ensure implementation of the Global Compact for Migration. The cross-regional dimension of migration trends and patterns in Eastern and Southern Africa requires a holistic approach that looks at the most adequate support that the United Nations could provide to countries of origin, transit and destination in the subregion within the framework of the 2030 Agenda and the Global Compact for Migration. It is with this understanding that the Regional Network for Eastern and Southern Africa has been established as a common platform, bringing together the IOM Regional Office for Southern Africa (Pretoria), the IOM Regional Office for Eastern and Horn of Africa (Nairobi) and other United Nations agencies to support the implementation, follow-up and review of the Global Compact for Migration in a holistic manner. As part of the United Nations system-wide reprofiling exercise towards enhanced inter-agency collaboration, the Regional Network will serve as a forum to champion migration as a key transboundary issue under the framework of the Regional Collaborative Platform led by the United Nations Economic Commission for Africa (UNECA). IOM will support the Member States in the region in line with national and regional priorities, leveraging the potential of migration through a whole-ofgovernment approach to achieve sustainable development outcomes for all. It is a direct contribution to the Decade of Action to fast-track progress towards the SDGs, bringing greater coherence and developmental impact to the Organization's activities and allowing for a connected approach in the way it designs and delivers its operations.

<sup>73</sup> IOM, 2021h.

<sup>74</sup> IOM, 2021i.

<sup>75</sup> IOM, 2020k.

Insecurity, lack of economic livelihood, drought and crop failure are some of the push factors that motivate migrants to choose risky migratory routes in search of better opportunities in Southern Africa. Labour mobility remains one of the dominant forms of migration in this region, despite sporadic incidents of xenophobia, discrimination and violence against migrants. As is the case in other parts of the world, the profound impact of migration on the societies and institutions of receiving countries in Southern Africa cannot be overstated. The nexus between population mobility and health remains a challenge for migrants, as well as for the communities in which they live. The negative narrative about migration and migrants fuels adverse public perceptions of foreigners and, in turn, affects social cohesion. It is therefore important that migration governance policies and programmes consider the sensitivities around the issue to address them effectively. Additionally, the Southern African and Western Indian Ocean regions are vulnerable to a range of hazards, as they are increasingly affected by climate change that causes more extreme weather events and increased frequency and intensity of disasters, leading to both chronic and sudden displacements of populations (including floods, disease outbreaks, storms and droughts, as well as earthquakes, wildfires, landslides, extreme weather, volcanic activity and insect infestations), making the region a host to over 6 million internally displaced persons.

## IOM's objectives in Southern Africa are to:

- Promote tapping into the mutually reinforcing links between migration and development for the benefit of countries of origin and destination, as well as migrants themselves (in line with SDGs 1, 10, 11 and 16).
- Ensure that vulnerable migrants benefit from increased protection provided by State and non-State actors, while supporting governments in addressing irregular migration (in line with SDGs 5, 8, 16 and 17).
- Provide assisted voluntary return and reintegration services to migrants returning from various countries of destination, including those in Southern Africa (in line with SDGs 10 and 17).
- Work towards well-managed labour migration that benefits migrant workers and employers, as well as the sustainable development of countries of origin and destination (in line with SDGs 1, 4, 5, 8 and 10).
- Protect vulnerable migrants and communities at risk and ensure they are more resilient throughout all phases of human-induced and natural crises (in line with SDGs 1, 2, 6, 9, 11, 13, 15, 16 and 17).
- Build the capacity of vulnerable communities to demonstrate enhanced coping mechanisms and resilience to environment-related and climate-induced change (in line with SDGs 10, 11, 13 and 17).
- Improve standards of physical, mental and social health and well-being of migrants and migration-affected populations (in line with SDGs 1, 3, 5, 8, 10, 11, 16 and 17).
- Strengthen migration management at borders across the region to facilitate safe, orderly and regular cross-border mobility (in line with SDGs 8, 9, 10 and 16).
- Facilitate intraregional and interregional cooperation and coordination in migration governance among Member States and RECs (in line with SDGs 10, 16 and 17).
- Continue working on resettlement assistance to refugees as a positive element of the migration continuum made possible through international solidarity and burden-sharing (in line with SDGs 1, 2, 3, 4 and 8).

#### The strategic priorities are:

- Resilience;
- Strengthening of early-warning systems;
- · Supporting durable and safe solutions for return and/or resettlement; and
- Understanding the drivers of migration.

Regional Office for Middle East and North Africa

IOM started its operations in the Middle East and North Africa (MENA) region in 1991 in the aftermath of the first Gulf War. The first Mission with Regional Functions was established in Cairo in 1998 and since then it has greatly evolved.

The Regional Office in Cairo provides support to IOM offices in the Middle East and North Africa through technical advice, training and the formulation of strategies, processes, projects and programmes; it also promotes and facilitates international dialogue, partnerships and coordinated migration policy development and programming between States, international organizations, non-governmental organizations (NGOs) and civil society.

Migration has long shaped the Middle East and North Africa, with many countries in the region simultaneously representing points of origin, transit and destination. The number of international migrants (including registered refugees) residing in the MENA region reached 40.8 million in 2020. The region hosts over a quarter of all people internally displaced by conflict and violence in the Syrian Arab Republic, Yemen and Iraq. In 2020, there were more than 22.2 million new internal displacements. The MENA region is the world's largest source region of refugees. The region has been further impacted by the COVID-19 pandemic since early 2020. While the short-term impacts are already being felt most acutely by vulnerable groups, the longer-term and socioeconomic, development-related and humanitarian consequences are yet to be fully determined.

The region is host to several inter-State consultation mechanisms on migration (ISCMs), to which IOM is an observer and either supports or provides the secretariats. These include the Arab Regional Consultative Process on Migration and Refugees Affairs (ARCP); the Horn of Africa Initiative on Human Trafficking and Migrant Smuggling (Khartoum Process); the Euro–African Dialogue on Migration and Development (Rabat Process); and the Abu Dhabi Dialogue, a Ministerial Consultation on Overseas Employment and Contractual Labour for Countries of Origin and Destination in Asia.

The region features five Migration Resource and Response Mechanisms (MRRMs) in Libya, specifically in Bani Walid, Qatroun, Sebha, Tripoli and Zwara. The main functions of the MRRMs are to offer a wide range of IOM services and needs-based assistance to vulnerable migrants, including health and psychosocial support and needed humanitarian items. In the Sudan, a Migrant Resource Centre (MRC) in Gedaref addresses migrants' immediate protection and assistance needs, as well as assisting them with access to information, while a Migration Resource and Response Centre (MRRC) in Khartoum provides migrants with medical assistance, counselling and information on the risks of irregular migration, and has established a programme for assisted voluntary return and reintegration to countries of origin.

In addition, IOM operates seven Migration Health Assessment Centres (MHACs) in six countries, namely Egypt (Cairo), Iraq (Baghdad, Erbil), Jordan (Amman), Lebanon (Beirut), Libya (Tripoli) and Yemen (Sana'a). Their main functions are to offer full health assessments to all applicants, including immunization and pre-departure medical screening with presumptive treatment, based on the respective receiving countries' relevant guidelines. MHACs are a one-stop-shop for all activities related to health screening, including registration, counselling, nursing operations, physical examinations, phlebotomy and laboratory services, radiology and vaccination.

	Key facts and figures for Regional Office Cairo, 2020
Number of migrants assisted	813 837
Number of IOM projects	436
Number of Member States in the region	8 Member States: Algeria, Egypt, Jordan, Libya, Morocco, the Sudan, Tunisia and Yemen 4 Observer States: Bahrain, Kuwait, Saudi Arabia and Qatar
Number of offices	There are offices in 13 countries: Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Qatar, the Sudan, Tunisia and Yemen, in addition to the Regional Office for the Middle East and North Africa based in Cairo and an operational presence in Saudi Arabia and the United Arab Emirates.
Number of staff	1 850 (excluding consultants, subcontractors and hourly staff)
Number of nationalities represented among staff	95
Key areas of work	The Regional Office and country offices are working hand-in-hand to implement the Organization's full programmatic spectrum, including movement and resettlement; emergency preparedness and response; post-crisis transition and recovery; migration health; labour migration and migration and development; counter-trafficking; migrant return and reintegration assistance; immigration and border management; and migration policy and research.
Key publications	<ul> <li>Situation Report on International Migration in the Arab Region.</li> <li>Women Migrant Domestic Workers in Lebanon: A Gender Perspective. 76</li> <li>Promoting Fair and Ethical Recruitment in a Digital World: Lessons and policy options. 77</li> <li>Assessing the Socio-Economic Impact of COVID-19 on Migrants and Displaced Populations in the MENA Region. 78</li> <li>IOM Regional COVID-19 Situational Report: Stories from the Field Compilation. 79</li> <li>Diaspora Engagement in Health in the Eastern Mediterranean Region: A desk review of experiences. 80</li> </ul>
Regional webpage	https://rocairo.iom.int/
Regional Strategy	Middle East and North Africa Regional Strategy 2020–2024. <sup>81</sup>

<sup>76</sup> IOM, 2021I.

<sup>77</sup> IOM, 2020I.

<sup>78</sup> IOM, 2021m.

<sup>79</sup> IOM, n.d.e.

<sup>80</sup> IOM, 2021n.

<sup>81</sup> IOM, 2020m.

## Key developments in Regional Office Cairo since IOM joined the United Nations system

Regional Office Cairo is a member of the Regional Collaborative Platform under the United Nations Reform at regional level. It provides specific technical support and coordination to country missions and (co)leads national United Nations Networks on Migration in respective countries in the region. This furthermore entails dedicated training to support the coordination of the local/national Network and positioning IOM in the United Nations Reform roll-out towards mainstreaming migration in key United Nations Country Team documents, such as the Common Country Assessment (CCA), the United Nations Sustainable Development Cooperation Framework (UNSDCF) and the Annual Joint Workplan.

The Regional Office supports regional dialogue processes, such as the Abu Dhabi Dialogue and the Arab Regional Consultative Process on Migration and Refugee Affairs; maintains liaison and partnerships with regional organizations, in particular the League of Arab States and the Economic and Social Commission for Western Asia — with which IOM co-convenes the Issue-Based Coalition on Migration in the Arab Region under the Regional Collaborative Platform — and regional networks, such as the Regional UNNM, for the implementation and review of the Global Compact for Migration. It contributes also to the work of the Regional UNNM for Africa and the Opportunity/ Issue-Based Coalitions (O/IBCs) on Migration under the Africa Continental Regional Collaborative Platform.

Some of the most important developments in the MENA region since IOM joined the United Nations system in 2016 are reflected in the major steps taken to enhance the protection of migrant workers; develop strategies addressing irregular migration and trafficking in persons; open pathways for regular migration for the purpose of labour; and offer education and protection for refugees, among many other new developments in migration governance.

The adoption of the Global Compact for Safe, Orderly, and Regular Migration in 2018 in Marrakech, Morocco, embodies a resolutely people-centred approach for migration to benefit all - migrants, as well as host communities in origin and destination countries. The overwhelming adoption of the Global Compact for Migration in the region marked a historic turning point in migration governance showcasing the pressing need for well-managed and evidence-based policies on migration. Anchored in human rights, the Global Compact for Migration presents an international framework for enhancing cooperation between relevant actors to improve the protection of migrants and maximize their contributions to sustainable development. At the same time, the "no one size fits all" nature of the Global Compact enshrines countries' national sovereignty and their rights to determine their migration policies in accordance with their national priorities, needs and capacities.

# Highlights: IOM's response to COVID-19 in Regional Office Cairo, 2020

**16** countries where IOM implemented COVID-19-related operations.

**USD 70.75 million** spent on COVID-19 activities.

**USD 7.8 million** to beneficiaries tasked with risk communication and community engagement efforts related to COVID-19.

**7,160** individuals received some return-related assistance.

**878,000** people reached with critical WASH supplies.

109,191 COVID-19 tests provided.

34

The combination of precarious situations in countries of origin and reduced access to regular migration pathways often leads to migrants being in an irregular situation when they enter, stay or work in a country without required documents or authorization. Countries in the region have taken significant steps to tackle irregular migration through regularization campaigns, granting migrants in irregular situations the possibility of regulating their status or leaving the country. In addition, countries have deployed efforts to ensure that migrants in irregular situations are not returned to conflict countries, nor are forcibly or collectively returned without due process and consideration of their individual circumstances.

To encourage the engagement of the countries of the region in the Global Compact for Migration implementation, review and follow-up, Regional Office Cairo, in partnership with the League of Arab States (LAS), the United Nations Economic Commission for Western Asia (ESCWA) in collaboration with the then Working Group on International Migration in the Arab Region, later the Regional Network on Migration for the Arab States, provided a platform for Member States in the region to discuss progress and challenges in implementing the Global Compact for Migration. This series of open and inclusive events represented the whole-of-government and whole-of-society approach promoted by the Global Compact. It entailed various dialogues and consultations in preparation for the first Global Compact for Migration Regional Review Conference for the Arab States, which took place on 24 and 25 February 2021, and the Multi-stakeholder Consultations on 23 February 2021. Two capacity-building workshops were held in June and August 2020 to introduce guiding templates for countries' Global Compact for Migration voluntary national reports and to consult representatives of Member States on the modalities and format of the Global Compact Regional Review process. In the build-up of the Global Compact review conference, additional stakeholders' dialogues took place in the region, notably with inter-State consultation mechanisms, parliamentarians, civil society, the private sector and academia, among others. All meetings were held online due to COVID-19 restrictions, with simultaneous interpretation in English, French and Arabic.

Economic and political instabilities shape mobility (including displacement) and demographic changes in countries in the MENA region. As a consequence, countries of the North African and the Mashreq subregion are confronted with protection challenges associated with irregular movements, as well as job nationalization policies in Gulf Cooperation Council countries that may impact access to their labour markets. As countries are experiencing economic challenges and mitigating or recovering from prolonged conflicts, IOM seeks to enhance its response in coordination with countries of origin and receiving countries alike. In the same light, Regional Office MENA has sought to support missions to capture the impacts of COVID-19 through tools established from socioeconomic impact assessments.

The 2020–2024 IOM MENA Regional Strategy foresees engagement in evidence-based policy and programming with a focus on three main pillars of resilience, mobility and governance, with specific regional priorities under each. In addition to building on the outlined policy engagement and knowledge management of migration in the region, IOM MENA aims to create closer interlinkages between data collection and migration policy design through utilizing the Global Compact for Migration knowledge platform and the United Nations Network on Migration's Knowledge Platform and Connection Hub. For example, the IOM Sudan Data Unit has established, and co-leads with United Nations High Commissioner for Refugees (UNHCR), the Data and Evidence Working Group under the Durable Solutions Working Group.

Regional Office Cairo has enhanced partnerships with governments, other United Nations agencies, media, NGOs and local communities and leads conversations on migration (including displacement), building on its credibility and positioning. By expanding partnerships with national, regional and international stakeholders, it continues to support the region in achieving adequate policy reforms that consider migration as a positive engine for achieving sustainable development.

#### ASIA and OCEANIA

Regional Office for Asia and the Pacific

IOM in Asia and the Pacific has ongoing activities in 40 countries, including 34 Member States and two Observer States. The Asia and Pacific Region is divided into five subregions: the Pacific, South-East Asia, East Asia, South Asia and South-West Asia.

A wide range of migration issues and priorities is present across the region. Some of the destination countries remain focused on policies restricting migration. There is also limited investment in integration, and returns are seen as a positive policy option in a limited number of countries (e.g. Australia). Notably, several countries in the region are not signatories to the Refugee Conventions, which creates a challenge in addressing complex mixed migration flows. Internal migration is very significant, but has only slowly emerged in the last few years as an interest linked to urbanization.

Regional cooperation and migration dialogue has been increasing in recent years at both bilateral and regional levels. This has resulted in arrangements to facilitate mobility and combat trafficking, notably in the Association of Southeast Asian Nations (ASEAN). Most positively, migration is now integrated in national development plans in some countries such as the Philippines and Bangladesh, but needs wider acceptance. However, there is support by several countries through the Global Compact for Safe, Orderly and Regular Migration for a "whole-of-society/government approach". Several countries also recognize that insufficient attention is paid to migration statistics and evidence-based policy formulation.

Key facts and figures for Regional Office Asia and the Pacific, 2020					
Number of migrants assisted	7 036 (AVRR); 793 (counter-trafficking), plus COVID-related figures below				
Number of IOM projects	365				
Number of Member States in the region	34 (2 Observer States)				
Number of offices	Present in 30 countries and ongoing activities in 40 countries				
Number of staff	Total in region: 4 275 (total in the Regional Office: 52)				
Number of nationalities represented among staff	50				
Key areas of work	Emergency and post-crisis; migrant protection and assistance; immigration and border management; migration health; labour migration and human development; and migration, environment and climate change.				
Key publications	<ul> <li>Asia and the Pacific — Regional Strategy 2020—2024.82</li> <li>IOM Asia—Pacific Regional Data Hub: Regional Secondary Data Review March 2021.83</li> <li>Asia—Pacific Migration Data Report 2020.84</li> <li>IOM Asia—Pacific Remittance Inflows 2021.85</li> </ul>				
Regional webpage	www.iom.int/asia-and-pacific				
Regional Strategy	Asia and the Pacific Regional Strategy 2020–2024.86				

<sup>82</sup> IOM, 2020n.

<sup>83</sup> IOM, 2021o.

<sup>84</sup> IOM, 2021p.

<sup>85</sup> IOM, 2021q.

<sup>86</sup> IOM, 2020n.

## Key developments in the Regional Office Asia and the Pacific since IOM joined the United Nations system

Since 2016, IOM in the Asia and the Pacific region has worked to achieve the following outcomes:

- Enhanced protection of and assistance to migrants in need;
- Reduced health vulnerability among migrants and migration-affected communities;
- Strengthened systems and tailored solutions that harness the benefits of migration;
- Access for migrants and other vulnerable populations affected by crises to essential humanitarian services;
- Strengthened capacity to manage migration crises across the region;
- Empowerment and strengthening of migrants' and affected communities' resilience to natural disasters and adaptation to climate change;
- Ensuring that policies and programmes are based on evidence and systematic monitoring and analysis of migration dynamics;
- Enhancing partnerships and dialogues in the region to address migration challenges and opportunities.

# Highlights: IOM's response to COVID-19 in Asia and the Pacific, 2020

**28** countries where IOM implemented COVID-19-related operations.

USD 71.5 million spent on COVID-19 activities.

**9,769,184** beneficiaries reached for risk communication and community engagement efforts related to COVID-19.

**188,544** individuals receiving some return-related assistance.

703,889 people reached with critical WASH supplies.

24,759 COVID-19 tests provided.

**445,346** most vulnerable individuals provided with livelihood support.

More details in the IOM Asia and the Pacific COVID-19 Achievements Report 2020.87

#### **EUROPE**

Regional Office for South-Eastern Europe, Eastern Europe and Central Asia

IOM has been active in the South-Eastern Europe, Eastern Europe and Central Asia (SEEECA) region from the early 1990s. During that time, many countries in the region were experiencing a complex mix of migration and displacement challenges resulting from huge geopolitical changes. Three decades later, IOM continues to provide comprehensive support to governments in refining their policies, frameworks and practical mechanisms for migration management and governance at national and multilateral levels. IOM brings extensive migration management and governance expertise closer to all its beneficiaries and the Member States it serves.

The IOM Regional Office, established in Vienna in 2011, supports further improvement in quality and diversification of programmatic activities at the country level, promotes regional initiatives and facilitates better support to inter-State dialogue and cooperation. Regional Office Vienna is responsible for project review and endorsement, policy development and the formulation of regional migration strategies. This is done in partnership with governments, development partners and civil society organizations within the region. The Regional Office employs technical experts in project development and thematic fields of migration management, including migrant protection and assistance, labour mobility and human development, immigration and border management, operations and emergencies, migration, environment and climate change, and migration health, complemented by policy and liaison, as well as support from migration data and research experts. It also deals with various cross-cutting issues and

provides support in the field of resource management, media and communications, and programme development, as well as monitoring and evaluation.

	Key facts and figures for Regional Office Vienna, 2020				
Number of migrants assisted	15 000 (migrant protection and assistance) Migration Health Division, labour mobility, human development and others				
Number of Member States in the region	19				
Number of offices	19, plus additional sub-offices				
Number of staff	1 714				
Key areas of work	Project development and thematic fields of migration management, including migrant protection and assistance; labour mobility and human development; immigration and border management; operations and emergencies; migration, environment and climate change; and migration health.				
Key publications	<ul> <li>Displacement Tracking Matrix Reports.<sup>88</sup></li> <li>GCM Regional Review for the UNECE Region Summary Report.<sup>89</sup></li> <li>Gender, SOGIESC and Migration in the 2030 Agenda and Global Compact for Migration.<sup>90</sup></li> </ul>				
Regional webpage	https://rovienna.iom.int/				
Regional Strategy	South-Eastern Europe, Eastern Europe and Central Asia Regional Strategy 2020–2024. <sup>91</sup>				

#### Key developments in Regional Office Vienna since IOM joined the United Nations system

IOM has coordination roles in a number of humanitarian crises in the region. These include leading the United Nations response clusters along the Eastern Mediterranean route, as well as in protracted conflicts such as that in eastern Ukraine.

In the region, COVID-19 prevention, mitigation and response measures implemented by IOM and its partners were crucial. In 2020, IOM was part of 15 United Nations coordination groups in the region on the COVID-19 response, reaching over 1.4 million people with risk communication or community engagement efforts, supporting nearly 200 points of entry in preparing for and responding to COVID-19, procuring and distributing over 4.5 million items of personal protective equipment and other non-food items in the response, and adapting sites that hosted over 60,000 migrants throughout the year with COVID-19-related upgrades.

Covering a region with some of the largest and most complex migration corridors in the world, IOM continued to focus on identifying opportunities to leverage migration to support development efforts, but also on mitigating risks related to labour migrant protection and social tensions, contributing directly to the achievement of a

<sup>88</sup> IOM, n.d.f.

<sup>89</sup> UN, 2020.

<sup>90</sup> IOM, n.d.g.

<sup>91</sup> IOM, 2021s.

number of SDG targets. In addition to its long- and newly established programmes targeted at facilitating labour mobility between the Russian Federation and Central, Eastern Partnership countries and the European Union, IOM initiated innovative collaborations with social psychologists to evaluate and improve the impact of its social cohesion programming (Turkey, Kosovo<sup>92</sup>), thus institutionalizing the intergroup contact theory approach both for the Regional Office Vienna region and beyond. During the COVID-19 pandemic, IOM also began cooperation with behavioural scientists and economists to develop interventions that trigger behaviour change towards greater use of digital remittance services and increase remittance use towards savings for predictive livelihood development. Furthermore, IOM made far-reaching changes to classical approaches to diaspora engagement by introducing and applying big data, including Google Analytics and onomastic analysis for diaspora mapping (Armenia, Azerbaijan, Georgia, Republic of Moldova); by developing guides for diaspora strategies (Albania, Bosnia and Herzegovina); and implementing concrete diaspora investment interventions (Georgia, Republic of Moldova, Ukraine). Regional Office Vienna also initiated a Migration Data Platform for Evidence-based Regional Development (M-Powered), 3 designed to help decision makers to leverage migration in support of the advancement of the Global Compact for Migration and the SDGs. The tool is being further developed for migration forecasting and modelling to enhance its impact on sustainable development (Germany, Republic of Moldova, Portugal). Regional Office Vienna also developed a Gender and Migration in the Global Compact for Migration and the 2030 Agenda project, 4 to support anyone working in migration programming and policy with mainstreaming, gender equality and gender sensitivity issues in the implementation of the Global Compact and SDGs.

Co-chaired by IOM, United Nations Development Programme (UNDP) and United Nations High Commissioner for Refugees (UNHCR), the Issue-Based Coalition (IBC) on Large Movements of People, Displacement and Resilience (LMPDR) serves as a platform to exchange information on public policy dialogues and legislative changes affecting persons of concern to the IBC. It also aims to provide coherent United Nations support at the country level towards nationalization of the SDGs, inclusive of key issues related to large movements of persons. The IBC bolsters over 100 members from 15 United Nations agencies and regional and country offices throughout the 18 United Nations programme countries in the Europe and Central Asia region. IOM's Regional Office in Vienna is also an active member of the Issue-Based Coalitions<sup>95</sup> on Gender Equality,<sup>96</sup> Health,<sup>97</sup> Youth and Adolescents,<sup>98</sup> and Environment and Climate Change,<sup>99</sup> as well as in the United Nations Regional Coordination Group on Data and Statistics. Regional Office Vienna, together with the United Nations Children's Fund (UNICEF) and UNHCR co-produces biannual Inter-Agency Factsheets on refugee and migrant children arriving in Europe.

Without prejudice to the mandates and roles of the participating agencies, the IBC also assumed the functions of a Regional UNNM, with the aim of capitalizing on the synergies between the global level UNNM and the IBC, while recognizing the programme of action and follow-up mechanisms of the Global Compact for Migration.

<sup>92</sup> References to Kosovo shall be understood to be in the context of United Nations Security Council Resolution 1244 (1999).

<sup>93</sup> IOM, n.d.h.

<sup>94</sup> IOM, n.d.g.

<sup>95</sup> UNECE, n.d.a.

<sup>96</sup> UNECE, n.d.b.

<sup>97</sup> UNECE, n.d.c.

<sup>98</sup> UNECE, n.d.d.

<sup>99</sup> UNECE, n.d.e.

To date, a total of 14 Country Networks have been established in the 18 United Nations Programme Countries of the Eastern Europe and Central Asia (ECA) region, all of which are co-chaired by IOM and the United Nations Resident Coordinator (except in the Republic of Moldova, where it is co-chaired by IOM and UNDP).

Moreover, IOM's Regional Office in Vienna – in support of an initiative led by the Regional Collaborative Platform for Europe and Central Asia, which was chaired by the Deputy Secretary-General and with the United Nations Economic Commission for Europe (UNECE) Executive Secretary and the UNDP Regional Director as co-vice-chairs, and of which of IOM is a permanent member – is contributing to the establishment of an information and knowledge management website that aims to improve the capacity of the United Nations system in Europe and Central Asia to support resident coordinators, United Nations country teams and governments in the implementation of the 2030 Agenda for Sustainable Development.

Additionally, five years into the implementation of the 2030 Agenda and the Sustainable Development Goals, the United Nations Department of Economic and Social Affairs (UN DESA) invited governments, United Nations entities and stakeholders from all sectors to share inspiring breakthroughs and success stories that are showing results and impacts, and which can also be replicated and scaled up. In response, IOM submitted several projects, of which 10 were selected and recognized as inspiring accelerators to the 2030 Agenda, four of which are from the SEEECA region. 100

More broadly, we can confidently say that migration is reflected in the all the United Nations Common Country Analyses, as well as the the United Nations Sustainable Development Cooperation Frameworks (UNSDCFs). Additionally, at the request of the United Nations Resident Coordinators (UNRCs) in the 18 programme countries in the ECA region, Regional Office Vienna coordinated the roll-out of the "Stronger UN system for GCM implementation" training. The training was delivered to the United Nations Country Teams (UNCTs) in Armenia, Georgia and Ukraine in July 2021 and Bosnia and Herzegovina in November by IOM and UNDP as the lead on the Network's Core Working Group 2.1.<sup>101</sup>

Since advocacy for the inclusion of migrants in COVID-19 vaccination plans is a global priority this year, Regional

Office Vienna, with the support of Regional Office Cairo, produced a short video designed to assist missions in their advocacy efforts.  $^{102}$ 

# Highlights: IOM's response to COVID-19 in Regional Office Vienna, 2020

**19** countries and Kosovo<sup>a</sup> where IOM implemented COVID-19-related operations.

**USD 5.8 million** spent on COVID-19 activities.

**1,411,253** beneficiaries reached for risk communication and community engagement efforts related to COVID-19.<sup>b</sup>

**6,638** migrants that were stranded due to COVID-19 and received return support.<sup>b</sup>

**1,950,481** people reached with critical WASH supplies (including hygiene items) and services to support the adoption of COVID-19 prevention measures.<sup>b</sup>

2,384 COVID-19 tests provided by IOM.<sup>b</sup>

**2,134** individuals provided with livelihood support.

Notes: (a) references to Kosovo shall be understood to be in the context of United Nations Security Council Resolution 1244 (1999); (b) figures from the global survey conducted by Headquarters, totals for the SEEECA region.

<sup>100</sup> Pre-Employment Support Programme for Syrians Under Temporary Protection and Host Communities in Turkey (Turkey); SME Strengthening and Support Programme (Let's Grow this Business) (Turkey); Armenian diaspora supports to COVID-19 response (Armenia); National Strategy on Migration and Action Plan 2019–2022 (Albania).

<sup>101</sup> Ibid

<sup>102</sup> Video available at www.youtube.com/watch?v=42x2iBqlJFM.

40

Regional Office for the European Economic Area, the European Union and NATO

The IOM Regional Office for the European Union (EU), the European Economic Area (EEA) and NATO, Regional Office Brussels, was established in September 2011 at a time when the Treaty of Lisbon (2009), European Union enlargement and deeper cooperation had reinforced the centrality of migration and asylum policy. Europe was also dealing with uneven recovery from the global economic and financial crisis — with unemployment rates in some countries remaining stubbornly high — and multiple crises in North Africa and the Middle East, which increased concerns about migration pressures. The combined internal and external challenges contributed to a deterioration of public perception towards certain categories of migrants, increasing xenophobia. At the same time, facilitating highly skilled immigration, migrant integration and refugee resettlement were highlighted as part of the EU's "global approach" to migration.

In this context, the new Regional Office in Brussels set out to advance IOM's global objectives through strategic partnerships with the European Union institutions, EU Member States and other countries in the region to promote a migrant-centred, rights-based migration management approach and to work with States to respond to migration issues, including complex crises, emergencies, socioeconomic challenges and mixed flow movements. Regional Office Brussels was tasked to strengthen and ensure the quality and coherence of policy, programming, project development and implementation in the region, and globally for EU-funded programming. IOM established (July 2012) and expanded (February 2016) a Strategic Cooperation Framework with the European Commission Directorates General for Migration and Home Affairs (HOME), International Partnerships (INTPA), Civil Protection and Humanitarian Aid Operations (ECHO), Neighbourhood and Enlargement Negotiations (NEAR) and the European External Action Service (EEAS).

Key facts and figures for Regional Office Brussels, 2020					
Number of migrants assisted	Under humanitarian programming in the Region: 50 534 Within European Economic Area (EEA) resettlement (RST), relocation (REL) and humanitarian assistance programme (HAP) programming: 14 329 (11 266 resettlements and humanitarian admissions, 3 063 relocations) Migrants assisted under assistance to vulnerable migrants (AVM): 2 259 Migrants assisted under assisted voluntary return and reintegration (AVRR): 16 449				
Number of IOM projects	Within EEA RST/REL/HAP programming: 30 Humanitarian programming in the region: 6 Active projects under counter-trafficking: 29 Active projects under AVRR/RST: 41 Global programme support for projects implemented outside the region: 105 Migration health: 7 Labour mobility and human development: 54 active projects in 2020				
Number of Member States in the region	32				
Number of offices	28 country offices				
Number of staff	2 853				
Number of nationalities represented among staff	103				

Key areas of work	Migrant protection and assistance (assistance to vulnerable migrants, assisted voluntary return and reintegration, counter-trafficking in human beings, protection of children in migration, resettlement, complementary pathways and relocation); Transition and recovery from crises (recovery, durable solutions and disaster risk reduction, transition and stabilization, election support); Humanitarian aid and civil protection (fundraising for humanitarian projects, policy and strategy on humanitarian aid); Immigration and border management (including the EU Readmission Capacity-Building Facility [EURCAP], migrant inclusion and social cohesion, labour mobility and ethical recruitment, migration and development); Migration health (health policy and legal frameworks, migrant-sensitive health systems, migrant health monitoring); IOM–EU cooperation around the world (Africa, Asia and the Pacific, Latin America and the Caribbean, Middle East, South-Eastern and Eastern Europe); and
Key publications	<ul> <li>Communications and policy outreach.</li> <li>Mainstreaming Migration into International Cooperation and Development (MMICD) toolkit for development partners on "Integrating Migration into COVID-19 Socio-economic Response". 103</li> <li>Driving Migrant Inclusion Through Social Innovation: Lessons for Cities in a Pandemic (joint publication with MPI Europe, produced under the ADMin4ALL project). 10</li> <li>Principles and Approaches to Guide the Relocation and Integration of UAC from Greece to Other EU Member States. 105</li> <li>IOM's Recommendations to the German Presidency of the Council of the EU as well as to the Croatian Presidency. 106</li> <li>IOM Views on the Roadmap for the EU's New Pact on Migration and Asylum. 107</li> </ul>
Regional webpage	https://eea.iom.int/
Regional Strategy	European Economic Area, Switzerland and the United Kingdom Regional Strategy 2020–2024. <sup>108</sup>

# Key developments in Regional Office Brussels since IOM joined the United Nations system

Migration management, European Union coordination and cooperation remained atop the political agenda in the region following the arrival of over one million migrants and refugees to Europe in 2015–2016. By 2016, the EU had extended the mandate of Frontex and it officially became the European Border and Coast Guard Agency. The EU–Turkey Statement of March 2016 and other factors contributed to reducing the number of sea crossings and irregular arrivals to the EU in the following years. With tens of thousands of migrants and refugees in Greece, IOM scaled up to support the Government through several EU-funded programmes, including site management support, protection of vulnerable groups and refugee integration. Between 2016 and 2018, IOM supported the relocation of

<sup>103</sup> IOM, 2020o.

<sup>104</sup> MPI and IOM, 2020.

<sup>105</sup> IOM, 2020p.

<sup>106</sup> IOM, 2020q.

<sup>107</sup> IOM, 2020r.

<sup>108</sup> IOM, 2020s.

42

some 35,000 asylum seekers from Greece and Italy to other EU States under the scheme. Today, IOM continues to assist through separate projects initiated by Greece, Italy and Malta with the relocation of vulnerable refugees and asylum seekers to other European countries.

The number of asylum applications lodged in the EU remained higher between 2016 and 2020 than the number of irregular arrivals at the sea and land borders; and while sea arrivals on the Eastern Mediterranean and the Central Mediterranean Routes declined significantly after 2016, the Western Mediterranean and the Western Africa—Atlantic route to the Canary Islands saw a sharp increase in activity between 2018 and 2021. The arrival of more than 23,000 people in the Canary Islands by sea in 2020 strained the islands' reception capacity, while COVID-19 further complicated the response. In February 2021, IOM began supporting Spain with EU funding through an Emergency Reception Facility on Tenerife to provide shelter, protection services, medical, legal and other types of assistance to the migrants. Despite reduced overall migrant arrivals, migrant deaths in the Mediterranean remained alarmingly high, while impasses over search and rescue and the disembarkation of rescued migrants made headlines as NGO rescue operations became a source of controversy. IOM and UNHCR in June 2018 responded with a joint proposal to the EU on a regional arrangement to ensure predictable disembarkation of persons rescued at sea.

The EU and its Member States extended further cooperation with IOM in the framework of the EU Trust Fund for Africa (EUTF) and the African Union–European Union–United Nations Tripartite Taskforce on the Situation of Stranded Migrant and Refugees in Libya. In December 2016, the EU, the Governments of Germany and Italy, and IOM launched the EU–IOM Joint Initiative for Migrant Protection and Reintegration through the EUTF to support African countries in strengthening migration governance and to save lives and protect and assist migrants along key migration routes in Africa. Through its policy and programming, IOM in the region is working with States and EU institutions in the interest of harmonizing the management of irregular migration and borders with the facilitation of labour migration and skills mobility to address demographic trends and labour market requirements. The Organization has expanded programmes promoting the mainstreaming of migration into development cooperation and is strongly engaged on migration and climate-change policy through the European Green Deal. IOM has also contributed its recommendations on the European Commission proposals for a new European Pact on Migration and Asylum, which was tabled in September 2020.

Regional Office Brussels in February 2021 published its strategic priorities for the EEA, Switzerland and the United Kingdom for 2020–2024, integrating key elements of the overall IOM Strategic Vision to respond to emerging needs within the region. Reflecting on migration realities and policy trends in each country in the region, the overall strategic goal is to pursue safe, orderly and regular migration to enhance the well-being of migrants and societies through a rights-based and whole-of-government approach to the governance of migration and mobility to, from and within the region that is coherent, holistic and balanced. The strategy also outlines how IOM in the region will seek to address current and future regional and cross-regional migration and displacement trends, challenges and opportunities, including through collaboration with United Nations agencies and other partners.

The COVID-19 pandemic engendered a mobility crisis with unprecedented economic, social and humanitarian impacts in the region, as border closures and in-country travel restrictions changed patterns in mobility through the shutdown of airline services, altered border and migration management systems, and growing distrust of cross-border movements and non-residents. Migrants, including seasonal workers, refugees and asylum seekers, became stranded after sudden and uncoordinated border closures, unable to move from temporary locations. At the same time, many countries in the region experienced an acute shortage of agricultural and other key workers due the disruption in seasonal and circular migration. Pandemic restrictions in neighbouring countries and regions led to

a marked reduction of irregular arrivals by sea and land across all routes to the EU in late 2020, but irregular movements re-emerged in early 2021 on the West Africa/Atlantic and Central Mediterranean routes.

IOM's response to the pandemic in the region in 2021 was guided by a robust Strategic Response and Recovery Plan (SRRP), which built on the 2020 Plan, encompassing life-saving assistance and response to humanitarian needs, initiatives to mitigate the impact of COVID-19 on migrants and societies, and support for recovery and resilience, integrated with longer-term sustainable development planning. Regional Office Brussels and the offices in the region also adapted work modalities, services and assistance to migrants by negotiating with the EU and Member States for more flexibility in programming and by transferring services online, moving to remote programming modalities and digital communications, while direct assistance for stranded migrants was provided in the framework of its protection activities whenever feasible. Assisted voluntary return and reintegration (AVRR), resettlement and relocation movements were temporarily halted, but were resumed as soon as possible. Registration modalities, virtual counselling and referrals were also tested in the framework of AVRR. Information on COVID-19 measures was provided.

#### LATIN AMERICA AND THE CARIBBEAN AND NORTHERN AMERICA

Regional Office for South America

IOM offices were established in Argentina in 1953 to develop technical cooperation programmes between countries in the region. In 2011, the country office for Argentina was created to carry out projects addressing specific needs at the local level, and the Southern Cone Office then became the Regional Office with coordination functions and support for IOM activities in the region. Currently, the Regional Office covers 10 countries in South America (see Figure 1) and works in close coordination with the Office of the Special Envoy for the Venezuela Situation (OSE) created in 2018 and based in Panama.

The IOM Regional Office in Buenos Aires functions as the technical secretariat for the South American Conference on Migration (SACM) and works closely with the South American Common Market and its different bodies, more importantly with the Specialized Forum on Migration (FEM-MERCOSUR, for its acronym in Spanish). It also works closely with the Interamerican Network on Migration (RIAM, for its acronym in Spanish). With the former Argentine Presidency Pro Tempore of the SACM, IOM coordinated the establishment of six working groups on key thematic areas in 2020, on gender and migration; migration, environment and climate change; labour integration; border management; trafficking in persons; and migrant children and adolescents. The Regional Office facilitated a meeting in September 2021 between the SACM and the Regional Conference on Migration 109 (CRM for its acronym in Spanish) to define a joint workplan on migration, which marked a milestone in collaboration on migration management across Latin America and the Caribbean.

<sup>109</sup> The Regional Conference on Migration is a regional consultative process, known as the Puebla Process, including Member States from North and Central America.

Key facts and figur	res for Regional Office Buenos Aires and country offices in the region, 2020
Number of migrants assisted	2 722 524 migrants assisted through COVID-19 operations in 2020
Number of IOM projects	86 (as of June 2021)
Number of Member States in the region	10
Number of offices	10 country offices, 1 Office of the Special Envoy for the Venezuela situation, 1 Regional Office, 59 sub-offices (as of September 2021)
Number of staff	1 004 (as of September 2021)
Number of nationalities represented among staff	29 (as of September 2021)
Key areas of work	Protection and assistance to vulnerable migrants; migration and development; labour migration; migration, environment and climate change; emergencies and risk management; migration and health; policies and liaison; data and information management; migration research; knowledge management; communication and press; migration and cities; and integrated border management.
Key publications	<ul> <li>Review of the Normative Frameworks of Argentina, the Plurinational State of Bolivia, Chile, Peru and Uruguay.<sup>110</sup></li> <li>Diagnosis of the Situation and Incidence of Human Trafficking in Humanitarian Contexts in South America.<sup>111</sup></li> <li>Contributions from Colombia to the International Initiative for Reparations to Victims of Sexual Violence in the Framework of the Armed Conflict.<sup>112</sup></li> <li>Migrants in the Argentine Republic: Integration into the labour market.<sup>113</sup></li> <li>Evaluating the Evidence: Climate change and migration in Peru.<sup>114</sup></li> </ul>
Regional webpage	www.robuenosaires.iom.int
Regional Strategy	South America Regional Strategy 2020–2024. <sup>115</sup>

<sup>110</sup> Veiga, 2021.

<sup>111</sup> Ferreira, 2020.

<sup>112</sup> IOM, 2020t.

<sup>113</sup> Rubinstein and Lieutier, 2020.

<sup>114</sup> Bergmann et al., 2021.

<sup>115</sup> IOM, 2020u.

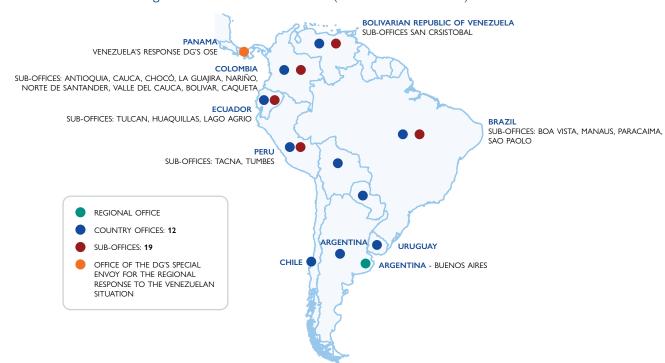


Figure 1. IOM in South America (offices and sub-offices)

Note:

This map is for illustration purposes only. The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the International Organization for Migration.

#### Key developments in Regional Office Buenos Aires since IOM joined the United Nations system

The structural socioeconomic inequality that characterizes the region, exacerbated by the impacts of the COVID-19 pandemic, along with processes of political instability, violence and episodes of disaster, have increased and diversified migratory processes in the region in recent years. In a pandemic context and with unprecedented related border closures, new migration patterns emerged, including irregular movements.

As of mid-2020, about 10.9 million international migrants live in South America, coming from different countries in the region and the world. Eighty per cent of them are intraregional migrants, with Venezuelan migration being the most important in quantitative terms (over 4.6 million Venezuelan nationals were estimated to have left the country as of 30 June 2021). The internal conflict in Colombia has caused substantial movement and displacement both internally and outwards, particularly to neighbouring countries (mainly Chile, Ecuador and the Bolivarian Republic of Venezuela). Properties (mainly Chile, Ecuador and the Bolivarian Republic of Venezuela).

Over the past decade, the region has experienced growing movements of Caribbean migrants (specifically Haitians and Cubans) and extraregional migrants from Africa and Asia. Irregular extraregional migration has been registered in both South America (beginning in some cases in Chile) and Central America, in particular in 2021; however, these movements are most noticeable in the Darien Gap, located on both sides of the Colombia–Panama border. Many

<sup>116</sup> UN DESA, 2021.

<sup>117</sup> R4V, 2021.

<sup>118</sup> UN DESA, 2021.

Caribbean migrants transiting across the region previously resided legally in countries such as Brazil and Chile, with children born there having acquired those citizenships, and then moved on due to several push and pull factors.<sup>119</sup>

The Regional Office for South America guides its actions within the framework of IOM's Strategic Vision, among other global frameworks, operationalized through the Regional Strategy 2020–2024 that defines priorities for action in South America and aligns with five key regional operational priorities, which comprise: (a) humanitarian and emergency assistance; (b) regularization; (c) integration; (d) combating xenophobia; and (e) migration, environment and climate change.

## Programmatic Highlights

Regional response to Venezuelan mixed migration flows. The Office of the Special Envoy for the Regional Response to the Venezuela Situation works closely with UNHCR and with the Joint Special Representative for IOM–UNHCR. Following the nomination of both organizations as co-leaders of the regional response, IOM and UNHCR have set up a Regional Inter-agency Coordination Platform (called R4V, Response for Venezuela) that covers 17 countries and is comprised of around 200 organizations, including United Nations agencies and NGOs.

Strengthening IOM's role as coordinator of the UNNM in South America. Regional Office Buenos Aires has participated actively in the establishment of the Issue-Based Coalition on Human Mobility of the United Nations, which functions as the regional UNNM, and in particular of its Working Group 1: Regional United Nations Network for the implementation, follow-up, and review of the Global Compact for Migration in Latin America and the Caribbean (UNNM-LAC). As of September 2021, seven UNNMs have been established;

# Highlights: IOM's response to COVID-19 in Regional Office Buenos Aires, 2020

**10** countries where IOM implemented COVID-19-related operations.

**USD 17.3 million** spent on COVID-19 activities (as of June 2021).

**2,373,389** beneficiaries reached for risk communication and community engagement efforts relating to COVID-19.

**8,426** individuals receiving some return-related assistance.

**255,418** people reached with critical WASH supplies.

1,000 COVID-19 tests provided.

**84,291** individuals provided with livelihood support.

six countries have approved the terms of reference for their Network; and two countries have started developing their workplans.

In the area of humanitarian and emergency assistance, specifically as part of COVID-19 response and recovery, the Regional Office publishes monthly COVID-19 situation reports and, in coordination with Regional Office San José, recently published the *Strategic Response and Recovery Plan for COVID-19 in Latin America and the Caribbean*.<sup>120</sup> Further, to address the health needs of migrants and to improve the access to and availability of health services, particularly in the COVID-19 pandemic context, the Regional Office also coordinates and supports the delivery of **comprehensive health programmes in South America, including** direct health assistance through community-based interventions and disease surveillance, health promotion and education, preventive care and screening, and curative care to migrants and mobile populations. Furthermore, IOM works in the area of protection of migrants in vulnerable situations with assistance and support.

Furthermore, the Regional Office is strengthening its knowledge management activities within IOM and its partners by developing a regional hub and a regional knowledge management strategy to foster a culture of sharing, learning and using existing experiences and good practices, including on regularization. This approach is particularly relevant in the context of the middle-income countries of the region with high levels of institutionalization.

Two regional projects on human mobility and border management are under way for (a) a pilot feasibility study of an electronic personal health record for migrants in Colombia and Ecuador to ensure continuity of treatment for migrants and mobile populations; and (b) a digital COVID-19 platform that features current mobility restrictions by country.<sup>121</sup>

Among others, a study in Chile and Paraguay with the Office of the Special Envoy for the Venezuela Response (OSE) and the United Nations Economic Commission for Latin America and the Caribbean (ECLAC) (forthcoming) looks into opportunities for migrants to support the economic recovery in the region after COVID-19, which will result in a methodological guide for conducting such studies. In addition, a toolkit for governments in South America will be developed to provide stakeholders with good practices and tools on socioeconomic integration and reintegration.

To combat xenophobia, the Regional Office developed a training programme for journalists in coordination with the Gabo Foundation, as well as an award ceremony and learning workshop organized with key journalists from the region to raise awareness on the positive contribution migration has on sustainable development.

To raise policy awareness and enhance interventions on migration, environment and climate change, the Regional Office organized a workshop with SACM Member States to advance the regional guidelines on cross-border displacement and assistance to migrants in disaster contexts.

Finally, in relation to migration and development, IOM is supporting governments in the region to empower their respective diasporas, among other issues. A groundbreaking diagnostic assessment was implemented in 2021 in countries across the region and in Europe that also analyses trends, challenges and opportunities offered by the recognition that diasporas often organize themselves in broader regional groupings and associations.

Regional Office for Central America, North America and the Caribbean

As part of organizational reform efforts and in response to the increasing complexity and scope of migration in the region, IOM established the Regional Office in San José in 2011. It oversees and coordinates IOM activities implemented by country offices and sub-offices in close collaboration with Member States, regional organizations, processes and initiatives, United Nations agencies, civil society and other relevant stakeholders. The region is also home to the Country Office with Resource Mobilization Functions in Washington, D.C., the country office with coordinating functions for the Caribbean in Guyana, the Office of the Director General's Special Envoy for the Regional Response to the Venezuelan Situation based in Panama, the Panama (Global) Administrative Centre and the Special Liaison Office in New York.

Key facts and figures for Regional Office San José, 2020					
Number of migrants assisted <sup>122</sup>	Countering-trafficking and addressing migrants' vulnerabilities to violence, exploitation and abuse: 14 165 Progress towards durable solutions: 148 042 Transition, recovery and stabilization: 36 257				
Number of IOM projects	104				
Number of Member States in the region	25				
Number of offices	country offices: 20; sub-offices: 41				
Number of staff	1 017				
Number of nationalities represented among staff	72				
Key areas of work	Supporting the implementation, follow-up and review of the Global Compact for Migration; reducing disaster risks, preventing displacement and assisting displaced populations; migration, environment and climate change; migrant protection and assistance to returnees and migrants in situations of vulnerability, including extraregional migrants; counter-trafficking; combating xenophobia and discrimination; border management; promoting regular pathways and regularization, including labour migration schemes; supporting countries with migration data for evidence-based policymaking; and engaging diaspora for sustainable development.				
Key publications	<ul> <li>La Movilidad Humana Derivada de Desastres y el Cambio Climático en Centroamérica.<sup>123</sup></li> <li>Mecanismos Sobre Migración Laboral en Mesoamérica.<sup>124</sup></li> <li>Informe Anual Programa de Retorno Voluntario Asistido (RVA). México y países del norte de América Central.<sup>125</sup></li> <li>El Tráfico Ilícito de Migrantes en América Central y México en el Contexto de la COVID-19.<sup>126</sup></li> <li>Migración Extraregional en Sudamérica y Mesoamérica: Perfiles, experiencias y necesidades.<sup>127</sup></li> <li>DTM: Countries Impacted by Hurricanes Eta and lota in Latin America and the Caribbean.<sup>128</sup></li> </ul>				
Regional webpage	https://rosanjose.iom.int/site/en				
Regional Strategy	Central America, North America and the Caribbean Regional Strategy 2020–2024. <sup>129</sup>				

<sup>122</sup> Showing totals of migrants assisted on more representative topics and/or those with more data available. Numbers drawn from IQ 2020 Country reports.

<sup>123</sup> IOM, 2021u.

<sup>124</sup> Chaves and Aragón, 2021.

<sup>125</sup> IOM, 2021v.

<sup>126</sup> IOM, 2020v.

<sup>127</sup> IOM, 2019b.

<sup>128</sup> IOM, 2020w.

<sup>129</sup> IOM, 2020x.

## Key developments in Regional Office San José since IOM joined the United Nations system

Central America, North America and the Caribbean is a highly diverse region comprising 25 countries and numerous territories with a total population of 589.03 million in 2020. Large income disparities exist not only among countries, but also within them. Most countries in Central America and the Caribbean face elevated risks resulting from exposure to hazards, both natural and human-induced, and specific vulnerabilities such as poverty and inequality, as well as a lack of coping capacity. Lack of employment opportunities, low incomes, poor or informal working conditions, violence (including gender-based violence), organized crime, persecution, insecurity combined with poverty, and droughts and floods exacerbated by a lack of access to effective social services, alongside the proximity to the United States of America, sets the stage for a region highly prone to migration.

To ensure a coherent and comprehensive strategic approach in line with IOM's Strategic Vision, the Regional Office in San José has developed a Regional Strategy for Central America, North America and the Caribbean for 2020–2024. It identifies key migration challenges, opportunities and priorities centred around three pillars: (a) resilience: addressing the adverse drivers of migration; (b) mobility: facilitating safe, regular and orderly forms of migration; and (c) governance: serving as a trusted and effective leader and partner in relevant bilateral, regional and global initiatives and processes.

Programmatic approaches include several topics:

In response to multiple sudden and slow-onset natural hazards, IOM has helped governments advance public policy to reduce disaster risks, prevent displacement and assist displaced populations. IOM has also undertaken post-crisis transition and recovery programming, particularly in the Caribbean.

In 2020, the Pan American Health Organization (PAHO) and IOM signed an agreement to improve the health of 75 million migrants in the Americas by scaling up coordinated interventions and strengthening advocacy to include the specific needs of migrants in health. IOM's COVID-19 response focuses on prevention, access of affected people to basic services and mitigation of the socioeconomic impact of the pandemic.

As for migrant protection and assistance, IOM supports returnees in El Salvador, Guatemala, Haiti and Honduras and by providing humanitarian assistance, food, transportation, medical and psychosocial services. Along the border between Haiti and the Dominican Republic, Border Resource Centres established with IOM's help orient vulnerable returnees. IOM also helps governments with the reception of returnees and their sustainable reintegration beyond the initial assistance.

IOM and UNHCR co-lead the regional response to the situation of refugees and migrants from the Bolivarian Republic of Venezuela seeking access to basic rights, services and protection, as well as self-reliance and socioeconomic integration. Working with other United Nations agencies, IOM helps address the challenges of extraregional migrants entering Panama, including data collection through the Displacement Tracking Matrix and support to migrant reception centres.

An inter-agency collaboration has helped Regional Consultations on Migration (RCM) Member States develop child protection guidelines. In Nicaragua, IOM has trained officials in attending to unaccompanied children and adolescent migrants, complemented by communication campaigns on the topic using the methodology of Communication for Development (C4D).

IOM's counter-trafficking efforts have produced standard operating procedures, training, research to partners, and continued support to National Coalitions against Human Trafficking and the Regional Coalition against Trafficking and Smuggling. Providing urgent, short- to medium-term assistance to victims of trafficking, including basic needs, medical services and legal assistance, remains a top priority for IOM.

IOM programmatic support to RCM on gender and women in the context of mobility includes the development of guidelines on assistance and protection and the organization of three annual meetings.

Throughout the region, IOM has promoted regular migration paths and regularization with best practices that resulted in up to 14,400 visas facilitated every year through the Brazil Visa Application Centre (BVAC) in Haiti; a registration plan for more than 16,000 Venezuelan migrants in Trinidad and Tobago; and C4D campaigns and workshops to prevent irregular migration.

IOM has assessed border management systems and biometric data initiatives. In Haiti, IOM is helping to equip the official points of entry with the Migration Information and Data Analysis System (MIDAS) to register and identify travellers. With IOM support, the RCM developed a multiannual workplan on counter-smuggling to implement in 11 countries of the region.

IOM has helped governments review and develop labour migration policies in line with international standards, which resulted in legislation, studies, technical advice and capacity-building. IOM Costa Rica supported the establishment of a Labour Migration Traceability System to track migrants' health conditions and movements, which allowed the circular flow of 15,000 labour migrants in 2020 and 2021.

IOM in the region has implemented targeted actions to engage diaspora, through mapping initiatives that identify available skills and interests in supporting countries of origin and destination, developing diaspora investment toolkits in Jamaica and strengthening Venezuelan diaspora organizations in Panama.

IOM has supported Central American and Caribbean governments to enhance their capacity to collect, analyse and use migration data to advance in developing national migration policies and strategies.

As the Coordinator of the UNNM, IOM has made significant progress in building support capacity at the country and regional level. There are seven national Networks on Migration and/or equivalent working groups in Costa Rica, El Salvador, Guatemala, Haiti, Honduras, Mexico and Panama. Canada, El Salvador, Honduras and Mexico are part of the Champion Country initiative.

IOM co-leads with ECLAC, UNHCR and UNICEF the Issue-Based Coalition on Human Mobility (IBC-HM). As a working group of the IBC, the Regional UNNM, co-led by IOM and ECLAC, successfully undertook the first Global Compact for Migration Regional Review.

IOM has incorporated migration in Common Country Analyses (CCA) and the United Nations Sustainable Development Cooperation Frameworks (UNSDCFs). In Cuba, IOM for the first time joined the UNSDCF 2020–2024.

### Highlights: IOM's response to COVID-19 in Regional Office San José, 2020

**15** countries where IOM implemented COVID-19-related operations.<sup>a</sup>

**USD 19 million** spent on COVID-19 activities.<sup>b</sup>

**7.5 million** people reached for risk communication and community engagement efforts relating to COVID-19.<sup>a</sup>

**460** individuals receiving some return-related assistance.<sup>a</sup>

**292,300** people reached with critical WASH supplies.<sup>a</sup>

15,558 COVID-19 tests provided.<sup>b</sup>

**9,185** individuals provided with livelihood support.<sup>a</sup>

- a Bahamas, Belize, Costa Rica, Dominica, the Dominican Republic, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, and Trinidad and Tobago.
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WORLD MIGRATION REPORT 2022 51

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APRIL 13, 2021



# Key facts about the changing U.S. unauthorized immigrant population

BY MARK HUGO LOPEZ, JEFFREY S. PASSEL AND D'VERA COHN

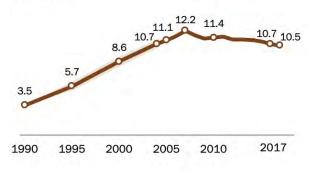
Border Patrol apprehensions of migrants at the U.S.-Mexico border <u>are on the rise</u> again. Although the <u>majority of people</u> attempting to enter the United States illegally are stopped, this trend could foreshadow an increase in the U.S. unauthorized immigrant population after years of relative stability. Yet the activity at the southwestern U.S. border is only one part of the overall story of unauthorized immigration, as a growing share of this population came from regions other than Mexico or Central America and entered the U.S. legally but overstayed their visas.

The unauthorized immigrant population is always changing and churning. The total number in the country can remain stable or decline even as new immigrants enter illegally or overstay a visa, because some voluntarily leave the country, are deported, die or become lawful residents. In short, the dynamic nature and pace of migration patterns has resulted in an unauthorized immigrant population whose size and composition has ebbed and flowed significantly over the past 30 years.

Here are key facts about this population and its dynamics.

#### Number of unauthorized immigrants in the U.S. has declined since 2007

In millions



Note: Shading shows range of estimated 90% confidence interval. Source: Pew Research Center estimates based on augmented U.S. Census Bureau data.

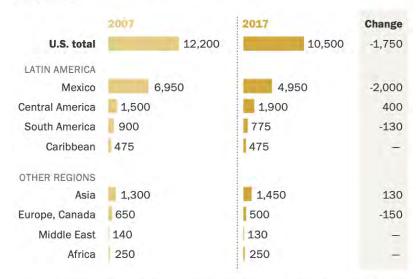
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#### The U.S. unauthorized immigrant population rose rapidly from 1990 to 2007 before declining sharply for two years and stabilizing at 10.5

million in 2017. Pew Research Center's most recent estimate is well below a peak of 12.2 million in 2007, but roughly triple the estimated 3.5 million in 1990. The estimate includes 1.5 million or more people who have temporary permission to stay in the U.S. through programs such as <u>Deferred Action for Childhood Arrivals (DACA)</u> and <u>Temporary</u> Protected Status (TPS), as well as people awaiting decisions on their asylum applications; most could be subject to deportation if government policy changed.

## U.S. unauthorized immigrant populations declined or held steady for most regions of birth since 2007

In thousands



Note: All numbers are rounded. Change column calculated from unrounded totals, giving a more accurate estimate of difference than subtracting rounded totals. Only statistically significant changes based on 90% confidence interval are shown; other measured changes are not statistically different from zero. Asia consists of South and East Asia. All central Asian republics of the former Soviet Union are included in Europe. The Middle East consists of Southwest Asia and North Africa; Africa consists of sub-Saharan Africa. The U.S. total includes a residual (not shown) from other nations.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data.

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Mexican unauthorized immigrants are no longer the majority of those living illegally in the U.S. As of 2017, 4.9 million unauthorized immigrants in the U.S. were born in Mexico, while 5.5 million were from other countries, the first time since at least 1990 that those from Mexico (47% in 2017) were not a majority of the total. In 2007, an estimated 6.9 million unauthorized immigrants were Mexican, and 5.3 million were born in other countries. The population of Mexican-born unauthorized immigrants declined after 2007 because the number of newly arrived unauthorized immigrants from Mexico fell dramatically – and as a result, more left the U.S. than arrived.

# The number of unauthorized immigrants from <u>nations other than</u> <u>Mexico</u> ticked up between 2007 and 2017, from 5.3 million to 5.5

**million.** The population of unauthorized immigrants born in Central America and Asia increased during this time, while birth regions of South America and Europe saw declines. There was not a statistically significant change among other large regions, including the Caribbean, Middle East-North Africa and sub-Saharan Africa.

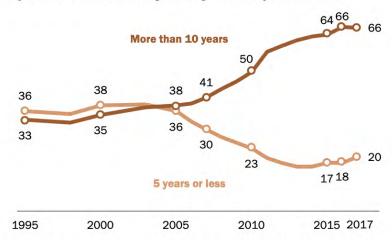
A rising share of U.S. unauthorized immigrants apparently arrived in the country legally but overstayed their visas. Nearly all people apprehended while attempting to enter the country illegally at the U.S.-Mexico border are

7/7/22, 1:15 PNCase 1:18-cv-00068 Decamentu6delus unailedian idak@aliataXed Resagnated of 704 from either Mexico or Central America. This stands in contrast to the origins of visa overstays.

In recent years, immigrants from countries outside of Mexico and Central America accounted for almost 90% of overstays, and in 2017, there were more than 30 overstays for every border apprehension for these countries. Although the Census Bureau data Pew Research Center uses to estimate the size of the unauthorized immigrant population does not indicate directly whether someone arrived with legal status, the origin countries of immigrants in these sources provide indirect evidence. From 2007 to 2017, the share of newly arrived unauthorized immigrants (those in the U.S. five years or less) from regions other than Central America and Mexico – the vast majority of whom are overstays – increased from 37% to 63%. At the same time, the share of new unauthorized immigrants from Mexico fell from 52% to 20%.

### Short-term residents decline and long-term residents rise as share of U.S. unauthorized immigrants

% of adult unauthorized immigrants, by duration of U.S. residence



Source: Pew Research Center estimates based on augmented U.S. Census Bureau data.

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# The decline in the arrival of new unauthorized immigrants in recent years has resulted in a population that is increasingly settled in the

**U.S.** About two-thirds of unauthorized immigrants (66%) had lived in the U.S. for more than 10 years as of 2017, up from 41% 10 years earlier. Conversely, newly arrived unauthorized immigrants (those in the U.S. five years or less) accounted for 20% of the unauthorized immigrant population in 2017 versus 30% in 2007. For Mexicans, the pattern is even more pronounced. The vast majority (83%) of unauthorized immigrants from Mexico have been in the country more than 10 years, while only 8% have lived in the U.S. for five years or less.

Topics Unauthorized Immigration, Immigrant Populations

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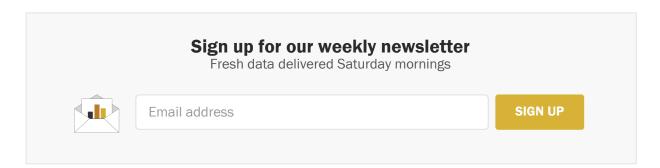


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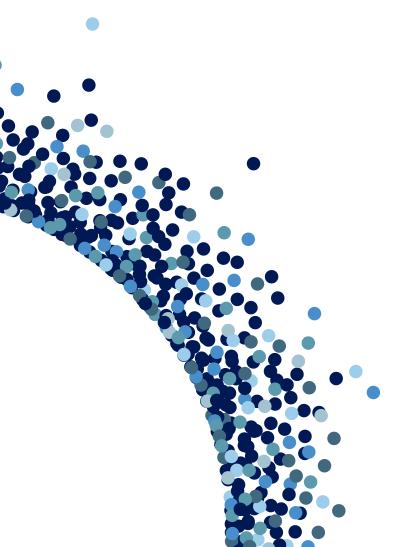
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# **BRIEFING**

## The Labour Market Effects of Immigration



**AUTHORS**: Dr Martin Ruhs

Dr Carlos Vargas-Silva

PUBLISHED: 18/02/2020 NEXT UPDATE: 15/02/2021

6th Revision





This briefing discusses the impacts of immigration on the labour market in the UK, focusing on wages and employment.

#### **Key Points**

The impacts of immigration on wages and employment of existing workers depend on factors such as whether migrants' skills are complements or substitutes to the skills of existing workers, and how immigration affects the demand for labour

Research shows a very small impact of overall immigration on employment and unemployment of UK-born workers, though this effect is stronger among those with lower levels of education

Research suggests that immigration has small impacts on average wages of UK workers but that the impacts are not evenly distributed: low-waged workers are more likely to lose while medium and high-paid workers are more likely to gain

The wage effects of immigration are likely to be greatest for resident workers who are migrants themselves

#### **Understanding the evidence**

The outcomes of any study of the impacts of immigration depend on how "migrants" are defined. All available research studies on the labour market effects of immigration in the UK define migrants as foreign-born persons (for a discussion of alternative definitions, see the briefing Who Counts as a Migrant?).

It is important to distinguish between the effect of immigration on the average wage of all workers in the economy, and on the wages of different groups of workers along the wage distribution (e.g. low, medium and high-paid workers). It is possible, for example, that immigration leads to a rise in the average wage of all workers, but to a fall in the wages of some low-paid workers. Similarly, immigration may not affect the overall employment outcomes of existing workers, but it may impact on the employment outcomes of specific educational groups.

#### Theory does not predict exactly what the labour market effects of immigration will be

The impacts of immigration on the labour market critically depend on the skills of migrants, the skills of existing workers, and the characteristics of the host economy. They are also likely to differ between the short and long run when the economy and labour demand can adjust to the increase in labour supply.

Immigration affects the labour supply, as it increases the pool of workers in certain sectors of the economy. At the same time, immigration is likely to increase the demand for labour, as migrants expand consumer demand for certain goods and services. That is, immigration may increase competition for existing jobs in certain occupational sectors but it can also create new jobs.

The immediate short-term effects of immigration on the wages or employment of existing workers depends on the extent to which migrants have skills that substitute or complement those of existing workers (e.g. Borjas 1995).

When migrant workers are substitutes for existing workers, immigration is expected to increase competition for jobs and reduce wages in the short run. In terms of employment, the extent to which declining wages increase unemployment or inactivity among existing workers depends on their willingness to accept the new lower wages. If, on the other hand, the skills of migrants are complementary to those of existing workers, all workers experience increased productivity which can be expected to lead to a rise in the wages of existing workers. In general, workers in low skilled occupations are expected to face more competition from migrants because the skills needed for those jobs are easier to acquire and are less specialised.

Second, in addition to expanding labour supply, immigration can also expand the demand for labour and, thus create new jobs. This is because there is not a fixed number of jobs in the economy (the so-called "lump of labour fallacy"). Migrants expand consumer demand for goods and services, and employers may increase production in sectors where migrant labour is used (e.g. agriculture or care sectors).

Changes in wages and employment are not the only ways in which an economy responds to immigration. There are at least two other adjustment mechanisms (see e.g. Dustmann, Glitz and Frattini 2008). First, immigration may change the mix of goods and services produced in the economy and thus the occupational and industrial structure of the labour market. For example, the immigration of low-skilled workers may expand the production (provision) of certain products (service) that use low-skilled labour intensively. The expansion of the sector may then increase demand and drive wages back up. Similarly, immigration may change the technology used for producing (providing) certain products (services). For example, the immigration of skilled workers may encourage innovation and the adoption of more skill intensive technologies which would again affect labour demand. The extent to which investment and labour demand respond to immigration depends on the characteristics of the economy. During an economic downturn labour demand may respond more slowly than during times of economic growth.

# Research shows a small impact of overall immigration on the employment and unemployment rates of UK-born workers

A number of studies have examined whether immigration leads to higher unemployment or inactivity among existing workers, and most have found either small effects or no effect.

Reviewing the results of 12 studies conducted between 2003 and 2018, the Migration Advisory Committee (2018) drew three conclusions. First, that immigration has little or no impact on average employment or unemployment of existing workers. Second, that where an impact is found it tends to be concentrated among certain groups – i.e. a negative effect for those with lower education and a positive effect for those with higher levels of education. And third, that the impact may depend on the economic cycle; some—though not all—studies have found adverse effects on employment or unemployment specifically during downturns.

For example, Dustmann et al. (2005) concluded that immigration had no effect on the overall employment outcomes of UK-born workers but did find adverse effects on the employment of UK-born workers with intermediate education and a positive impact on those with A-levels or university degrees. Lemos and Portes (2008) analysed the impact of labour immigration of EU-8 workers on claimant unemployment, finding little evidence of an adverse effect. Another study focusing on London, the region with the highest levels of migration over the past few decades, also found no negative effects (Fingleton et al, 2019).

MAC (2018) also produced new results, suggesting that immigration from EU countries during the 34-year period from 1983 to 2017 had reduced the employment rate of the UK-born working age population by around 2 percentage points and increased unemployment by 0.6 percentage points. However, it also noted that with employment rates at a historic high towards the end of this period, one should "be cautious in suggesting these outcomes could be much better than they already are."

# Immigration has small impact on average wages but the effects are not evenly distributed: low-waged workers are more likely to lose while medium and high-paid workers are more likely to gain

Empirical research on the labour market effects of immigration in the UK suggests that immigration has relatively small effects on average wages, with negative effects on low-paid workers and positive effects on high-paid workers.

Reviewing 12 studies conducted between 2003 and 2018, MAC (2018) concluded that immigration had had little impact on average wages. Some studies (e.g. Nickell and Saleheen, 2015) had found a small negative impact on average wages while others (e.g. Dustmann et al, 2013) found positive average effects.

As with the impacts on employment and unemployment, several studies have found that effects are different for high vs. low skilled/paid workers. For example, Dustmann et al (2013) find positive effects for most workers but negative effects for the lower paid; they found that a 1 percentage point increase in the ratio of migrants to non-migrants leads to a 0.6% decrease in wages for workers at the 5th earnings percentile and a 0.5% decrease at the 10th percentile. Another study focusing on wage effects at the occupational level found that, in the unskilled and semi-skilled service sector, a 1 percentage point rise in the share of migrants reduced average wages in that occupation by about 0.2% (Nickell and Salaheen 2015).

The MAC (2018) estimated that an increase in the number of EU migrants corresponding to 1% of the UK-born working-age population resulted in a 0.8% decrease in UK-born wages at the 5th and 10th percentiles (i.e. people in the bottom 5–10% of earners), and a 0.6% increase at the 90th percentile (i.e. high earners). In practice, this means that between 1993 and 2017, the total effect of EU migration on the wages of UK-born workers was estimated to be a 4.9% reduction in wages for those at the 10th earnings percentile, a 1.6% reduction at the 25th percentile, a 1.6% increase at the 50th percentile, and a 4.4% increase at the 90th percentile. The calculation of the total impact should be interpreted with caution, however, because the model estimates the short-run response to migration, which is expected to disappear over time (MAC, 2018: 32).

Finally, research suggests that any adverse wage effects of immigration are likely to be greatest for resident workers who are themselves migrants. This is because the skills of new migrants are likely to be closer substitutes for the skills of migrants already employed in the UK than for those of UK-born workers. Manacorda, Manning and Wadsworth (2012) analyse data from 1975–2005 and conclude that the main impact of increased immigration is on the wages of migrants already in the UK.

#### **Evidence gaps and limitations**

It is important to recognise that the analysis of the labour market effects of immigration faces a number of methodological challenges. For example, as migrants often go to areas that are experiencing economic growth and strong labour demand, immigration can be both a cause and consequence of changes in wages and employment. This makes it difficult to establish causality.

Another problem is that international immigration into a certain area may cause some workers to leave that area and migrate to other parts of the country or abroad. Whenever this happens, the labour market effects in a certain area are dissipated across the country which makes correct measurement through local labour market analysis more difficult.

There can also be difficulty in distinguishing whether migrants are actually impacting the wages of UK-born workers, or whether the figures for the average wage are being changed as a result of migrants growing as a proportion of

the workforce whilst being paid less (or more) than non-migrants, without them necessarily affecting actual wages UK-born workers receive (Nickell & Salaheen (2015) address this problem in their analysis).

A fourth methodological challenge arises from the quality of data on migrants, and especially specific subgroups of migrants, which are often based on small samples of the population and can thus lead to significant measurement error.

Empirical research has employed various methods and econometric techniques to address these issues, but none of them are perfect and some difficulties and caveats always remain.

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#### **Related Material**

Migration Observatory briefing Who Counts as a Migrant?

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#### **The Migration Observatory**

Based at the Centre on Migration, Policy and Society (COMPAS) at the University of Oxford, the Migration Observatory provides independent, authoritative, evidence-based analysis of data on migration and migrants in the UK, to inform media, public and policy debates, and to generate high quality research on international migration and public policy issues. The Observatory's analysis involves experts from a wide range of disciplines and departments at the University of Oxford.



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The Migration Observatory is based at the Centre on Migration, Policy and Society (COMPAS) at the University of Oxford. The mission of COMPAS is to conduct high quality research in order to develop theory and knowledge, inform policy-making and public debate, and engage users of research within the field of migration.

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### FEAR ASSESSMENT: COST-BENEFIT ANALYSIS AND THE PRICING OF FEAR AND ANXIETY

#### MATTHEW D. ADLER\*

#### INTRODUCTION

Death, illness, and injury are welfare-setbacks. So, too, is the fear of death, illness, and injury.¹ Yet at the level of regulatory practice, a striking asymmetry between the physical and psychological constituents of welfare has emerged. Cost-benefit analysis by the EPA, NHTSA, FDA, OSHA, and other environmental, health, and safety agencies typically includes a quantitative "risk assessment," where measures to reduce physical harm are under consideration.² The deaths, illnesses, and injuries avoided by the various interventions that the agency might undertake are enumerated and then, often, priced in dollar terms.³ But these agencies almost never engage in *fear assessment* (to coin a term). They almost never enumerate and price the distressing mental states, such as fear, anxiety, worry, panic, or dread, that are causally connected to environmental, occupational, and consumer hazards and would (or at least might) be reduced by more stringent regulation.⁴ In this Article, I argue against the

- \* Professor of Law, University of Pennsylvania Law School. Many thanks to Jonathan Baron, John Broome, David Driesen, Robert Hahn, Jason Johnston, Jack Knetsch, Seth Kreimer, Ro Malik, Eric Posner, Paul Robinson, Connie Rosati, Chris Sanchirico, Paul Slovic, Cass Sunstein, and to participants in a symposium at the Chicago-Kent College of Law and a faculty workshop at the University of Pennsylvania Law School, for their comments.
- 1. See Matthew D. Adler, Risk, Death and Harm: The Normative Foundations of Risk Regulation, 87 MINN. L. REV. 1293, 1321-40, 1375-85 (2003).
- 2. See Office of Management and Budget, Economic Analysis of Federal Regulations Under Executive Order 12866 § III.A.4 (January I1, 1996), at http://www.whitehouse.gov/omb/inforeg/riaguide.html (requiring that cost-benefit analyses of major rules include risk assessments); Robert W. Hahn et al., Assessing Regulatory Impact Analyses: The Failure of Agencies to Comply with Executive Order 12,866, 23 HARV. J.L. & PUB. POL'Y 859, 868 (2000) (examining forty-eight major nontransfer rules issued between 1996 and 1999 and finding that "[o]f those rules that listed benefits, approximately 70 percent described benefits in quantitative terms, either as a range or a best estimate").
- 3. See Hahn et al., supra note 2, at 870 ("[I]n 83 percent of the rules for which agencies identified safety benefits, the agency presented a monetized estimate of those benefits. In contrast, agencies monetized benefits for only 54 percent of the rules that identified health benefits.").
  - 4. See infra text accompanying notes 16-21.

asymmetry—fear assessment should be a component of cost-benefit analysis ("CBA"), at least for an important subset of agency decisions—and I discuss at some length how best to measure fear and related kinds of psychological distress on a monetary scale.

A contrasting pair of recent administrative rulemakings will serve to illustrate the current and conceivable role of fear assessment in CBA. In the arsenic rulemaking, the EPA compared various levels of arsenic contamination in drinking water to the baseline level of fifty micrograms per liter, the legally acceptable level at the time.5 Sophisticated risk assessment techniques were used to predict the number of bladder and lung cancer cases, both fatal and nonfatal, that would be avoided by reducing the arsenic level to twenty, ten, five, or three micrograms per liter.6 Each fatal cancer avoided was valued at \$6.1 million, and each nonfatal cancer at \$607,000.7 But the public's "peace of mind" from drinking less contaminated water was not quantified, let alone monetized8—even though the anxiety-reduction benefits here encompassed not merely the intrinsic benefit of being less anxious, but the reduction of costly aversive behaviors triggered by high perceived arsenic, such as drinking bottled water;9 even though the public tends to be particularly fearful of toxic chemicals. and arsenic (unlike many other compounds) is popularly known to be a toxin;10 and even though a fear assessment might have better justified the ultimate decision that the EPA did reach, since the monetized benefits of reduced cancer mortality and morbidity were smaller than regulatory costs at every arsenic level lower than the fifty micrograms per liter baseline.11

<sup>5.</sup> See National Primary Drinking Water Regulations; Arsenic and Clarifications to Compliance and New Source Contaminants Monitoring, 66 Fed. Reg. 6976 (Jan. 22, 2001) (codified at 40 C.F.R. pts. 9, 141, 142).

<sup>6.</sup> Id. at 7008-09.

<sup>7.</sup> Id. at 7012.

<sup>8.</sup> See id. at 7012, 7021.

<sup>9.</sup> See ABT ASSOCIATES, ARSENIC IN DRINKING WATER RULE ECONOMIC ANALYSIS, EPA 815-R-00-026, at 5-35 (Dec. 2000), available at http://www.epa.gov/safewater/ars/econ\_analysis.pdf.

<sup>10.</sup> See Cass R. Sunstein, The Arithmetic of Arsenic, 90 GEO. L.J. 2255, 2261-63 (2002).

<sup>11.</sup> See National Primary Drinking Water Regulations; Arsenic and Clarifications to Compliance and New Source Contaminants Monitoring, 66 Fed. Reg. at 7016. Cf. JASON K. BURNETT & ROBERT W. HAHN, EPA'S ARSENIC RULE: THE BENEFITS OF THE STANDARD DO NOT JUSTIFY THE COSTS (2001), available at http://aei.brookings.org/admin/pdffiles/reg\_analysis\_01\_02.pdf. Burnett and Hahn find that the costs of the arsenic rule outweigh the benefits even when a "high estimate" of nonquantifiable benefits, equaling four times the mortality-reduction benefit, is included in the analysis. Id. at 5-11. However, Burnett and Hahn use a relatively low monetary value for mortality-reduction (\$1.1 million instead of the \$6.1 million

The FDA's medical gloves rulemaking stands in sharp contrast to the EPA's arsenic decision.12 The FDA used CBA to determine whether to reduce the acceptable defect rate of gloves, used by doctors and nurses to examine patients, from the current baseline of 4 percent to a lower level of 2.5 percent.<sup>13</sup> These defect rates serve as lot-specific regulatory triggers: if the proportion of defects in a sample of gloves from a particular lot exceeds the acceptable level, no gloves in the lot may be sold for medical use. The FDA calculated not merely the reduction in the rate of blood-borne illnesses associated with a lower defect level, but also the reduction in blood screening tests ordered by medical personnel who experience defective gloves. Specifically, the FDA determined that 0.6 cases of HIV, 0.6 cases of hepatitis, and roughly 100,000 blood screening tests would be avoided annually by lowering the defect rate to 2.5 percent.<sup>14</sup> The benefits of lower HIV and hepatitis mortality and morbidity were then monetized, but so too were the benefits of fewer screening testsincluding both the avoided direct costs of testing and the anxietyreduction benefit. The monetary value assigned to anxiety-reduction was thirteen dollars per test-the cost of the anxiety state experienced by a medical worker sufficiently worried by a defective glove to order a blood screen, an anxiety state that begins when the worker perceives the defect and that ends (in most cases!) when she learns the test results.

The FDA arrived at the thirteen dollar figure by measuring anxiety on a "QALY" scale, and then converting from QALYs to dollars. QALYs, or quality-adjusted life years, are a widely used welfare scale in health economics. The scale ranges from zero (for death) to one (for a perfect health state). The FDA reasoned:

[Persons] who experience high levels of uncertainty due to the possibility of contracting serious, threatening diseases experience heightened levels of stress and anxiety until the results of the

assumed by the EPA), because they employ a relatively high discount rate (7 percent) to adjust the mortality-reduction benefit for latency. *Id.* at 6.

<sup>12.</sup> See Medical Devices; Patient Examination and Surgeons' Gloves; Test Procedures and Acceptance Criteria, 68 Fed. Reg. 15,404 (proposed Mar. 31, 2003) (to be codified at 21 C.F.R. pt. 800).

<sup>13.</sup> More specifically, the FDA's proposed rule lowers the acceptable defect rate for patient examination gloves to 2.5 percent, lowers the acceptable defect rate for surgeons' gloves to 1.5 percent, and makes certain other changes with respect to the regulation of glove quality. See Medical Devices; Patient Examination and Surgeons' Gloves; Test Procedures and Acceptance Criteria, 68 Fed. Reg. at 15,405.

<sup>14.</sup> See Medical Devices; Patient Examination and Surgeons' Gloves; Test Procedures and Acceptance Criteria, 68 Fed. Reg. at 15,408–13 (cost-benefit analysis of proposed rule).

testing screens are negative. According to one measurement scale of well-being, reduced mental lucidity, depression, crying, lack of concentration, or other signs of adverse psychological sequence may detract as much as 8 percent from overall feelings of well-being... Scaling of the relative stress caused by events shows that concerns of personal health, by themselves, are likely, on average, to contribute approximately one-sixth of the total weighting required to trigger a major stressful episode. Thus, FDA approximates that increased stress and anxiety concerning possible exposure to pathogens may reduce overall sense of well-being and result in a [QALY] loss of approximately 1.3 percent.

... FDA has calculated an assumed [monetary value] of \$373,000 for a statistical QALY [i.e., each year of life at a QALY value of 1]. This figure implies that the probability of each day of quality adjusted life has a social value of \$1,022 (\$373,000/365). If blood test results are usually obtained within 24 hours, the resultant loss of societal well-being for each test subject is valued at approximately \$13 (\$1,022 times 0.013). 15

This is a remarkable piece of public deliberation. We might worry about the agency's QALYs-to-dollars methodology for pricing anxiety-an issue I will discuss below. But in any event the FDA deserves much applause for its analytic originality. 16 Quantitative fear assessment, as exemplified by the gloves rulemaking, is extremely rare in American practice. I examined all rulemakings in the AEI-Brookings Joint Center database of major rules.<sup>17</sup> The database comprises virtually all the "economically significant" rules issued by federal executive agencies during the period 1996-1999, other than transfer rules (those that simply redistribute wealth or income).18 "Economically significant" rules are those for which agencies are required, by Presidential order, to prepare a formal cost-benefit analysis that is reviewed by the Office of Management and Budget.<sup>19</sup> There are forty-eight rulemakings in the database. In numerous cases agencies quantified and monetized death, illness, and physical injury, but in only a single instance—the FDA's mammography rulemak-

<sup>15.</sup> Medical Devices; Patient Examination and Surgeons' Gloves; Test Procedures and Acceptance Criteria, 68 Fed. Reg. at 15,413.

<sup>16.</sup> Cf. Eric Thunberg & Leonard Shabman, Determinants of Landowner's Willingness to Pay for Flood Hazard Reduction, 27 WATER RESOURCES BULL. 657, 657–58 (1991) (discussing attempt by the Army Corps of Engineers to monetize the psychological trauma caused by flooding).

<sup>17.</sup> See Hahn et al., supra note 2 (examining rulemakings in this database so as to assess agency compliance with the Presidential cost-benefit order).

<sup>18.</sup> See id. at 861-63 (describing criteria for including rulemakings in database); id. at 881-85 (listing rulemakings).

<sup>19.</sup> Exec. Order No. 12,866, 3 C.F.R. 638 (1994), reprinted in 5 U.S.C. § 601 (2000).

ing<sup>20</sup>—did an agency quantify or monetize fear, anxiety, or any other welfare-reducing mental states.<sup>21</sup>

Why is fear assessment so unusual? Part of the answer, surely, is normative: fear is difficult to predict and value, and thus agencies are often justified in resisting the measurement of fear. To put the point in cost-benefit terms: fear assessment has high deliberation costs, costs that are often not worth incurring, for example, if the population whose fears would be abated or inflamed by the agency decision is relatively small, or if the agency decision is not likely to have a causal influence on anxiety because the hazard being regulated is not "dreaded" or socially salient.22 But this normative answer is incomplete since, as the FDA's gloves rulemaking illustrates, there will be instances in which (ex ante) fear assessment is justified: prediction and valuation can be anticipated to be relatively tractable; mortality- and morbidity-reduction benefits are not large enough, alone, to determine the agency's choice; the agency has reason, preanalytically, to think that the options under consideration will have substantial psychological effects, as compared to baseline; and so on. Nor can the answer be that fear, by contrast with death, illness, or injury, is too intangible to be cognizable by risk regulators-consider the wide range of intangible benefits that are now standardly recognized within environmental economics, such as the enjoyment experienced by visitors to parks or other protected areas, the recreational benefits of

<sup>20.</sup> See Quality Mammography Standards, 62 Fed. Reg. 55,852, 55,962–63 (Oct. 28, 1997) (final rule).

<sup>21.</sup> The forty-eight agency decisions in the AEI database were final rules or, in a few cases, interim final rules. I examined the published Federal Register statements accompanying these decisions, and did not examine earlier agency statements published when the rules were proposed, or the regulatory impact analyses that agencies prepared for OMB review or other agency cost-benefit analyses connected to the decisions, except insofar as these were excerpted in the Federal Register. It is possible that agencies in some of these rulemakings priced fear in the regulatory impact analyses but not the Federal Register statements. I saw no indication that agencies did indeed engage in nonpublic fear-pricing, but have not attempted to rule out the possibility. Still, the paucity of cases where agencies publicly quantify and monetize fear, by contrast with the frequent public pricing of death, is striking. By my count, agencies explicitly quantified and monetized death, illness, or injury in thirteen of the forty-eight Federal Register statements accompanying the final rulemakings, and quantified but did not monetize death, illness, or injury in seven instances.

It might be argued that agency failure to quantify and monetize fear rests upon the view that the monetized valuations of life (VOSLs) agencies employ already incorporate fear costs. See infra Part II (discussing the possibility of the "bundled" valuation of fear and risk through "tailored" VOSLs). But I found no indication that agencies are consciously using VOSLs in this way.

<sup>22.</sup> See infra text accompanying notes 83-89.

hunting and fishing,<sup>23</sup> the improved visibility that accompanies better air quality,<sup>24</sup> smell- or noise-avoidance,<sup>25</sup> the "scenic" benefit of viewing a nice landscape,<sup>26</sup> and the sheer satisfaction of knowing that a site, ecosystem, or species exists<sup>27</sup>—nor that fear and anxiety are too trivial, since real ongoing anxiety about a hazard can be a serious welfare setback indeed.<sup>28</sup>

Is it too fanciful to think that the explanation is, in part, historical-specifically, that a now-obscure Supreme Court decision from the early 1980s partly explains the near-universal agency reluctance to price fear? Most scholars of risk regulation are familiar with the Supreme Court's Industrial Union Department v. American Petroleum Institute<sup>29</sup> decision, from 1980, which spurred the growth of risk assessment by demanding that OSHA quantify the riskiness of a workplace toxin before regulating it. A few years later, in Metropolitan Edison v. People Against Nuclear Energy, 30 the Court rejected a claim by a group of Harrisburg residents, living near the Three Mile Island nuclear plant, that the Nuclear Regulatory Commission was required to file an environmental impact statement addressing the psychological effects of restarting the plant. The Court held that psychological distress was not, without more, an environmental impact triggering the statutory requirement (under the National Environmental Policy Act ("NEPA")) for an impact statement. It evinced concern about the deliberation costs in quantifying fear, and skepticism about the ability of agencies to distinguish between genuine fear, on the one hand, and mere political preferences, on the other.

If contentions of psychological health damage caused by risk were cognizable under NEPA, agencies would... be obliged to expend

<sup>23.</sup> See A. MYRICK FREEMAN III, THE MEASUREMENT OF ENVIRONMENTAL AND RESOURCE VALUES 417–52 (2d ed. 2003) (discussing valuation of recreational benefits associated with natural resource systems, including fishing, hunting, boating, hiking, and camping).

<sup>24.</sup> See, e.g., Raymond Kopp et al., Cost-Benefit Analysis and Regulatory Reform, 3 HUM. & ECOL. RISK ASSESSMENT 787, 806–07(1997).

<sup>25.</sup> See, e.g., Eran 1. Feitelson et al., The Impact of Airport Noise on Willingness to Pay for Residences, 1 TRANSP. RES. (PART D) 1 (1996).

<sup>26.</sup> See, e.g., B. R. Bamber & Gaby Khoury, Contingent Valuation of Landscape, 135 Proc. Institution of Civil Engineers—Transp. 185 (1999).

<sup>27.</sup> See FREEMAN, supra note 23, at 137–59 (discussing nonuse values).

<sup>28.</sup> See Lisa Heinzerling, Environmental Law and the Present Future, 87 GEO. L.J. 2025, 2030-41 (1999).

<sup>29. 448</sup> U.S. 607 (1980) (plurality opinion); see also John D. Graham, The Risk Not Reduced, 3 N.Y.U. ENVTL. L.J. 382, 386 (1995) (describing Industrial Union as "[t]he turning point for quantitative risk assessment").

<sup>30. 460</sup> U.S. 766, 779 (1983).

considerable resources developing psychiatric expertise that is not otherwise relevant to their congressionally assigned functions.... [Further,] [a]nyone who fears or dislikes a project may find himself suffering from "anxiety, tension[,] fear [and] a sense of helplessness."<sup>31</sup>

Metropolitan Edison is, in effect, the negative counterpart to Industrial Union. Had Industrial Union been decided differently, risk assessment would be less central to decisionmaking at OSHA and, arguably, other federal agencies too. The whole discipline of risk assessment might not have developed nearly so rapidly. And, had Metropolitan Edison been decided differently, fear assessment would be more than a gleam in this scholar's eye. Agencies would have been required to characterize fear for NEPA purposes; that would have pushed them to quantify fear, and the step from quantification to monetization is not so large, given the "contingent valuation" techniques<sup>32</sup> now widely used to monetize the environmental intangibles mentioned above.

Historical speculation stops here. The thrust of this Article is normative. *Metropolitan Edison* may be rightly decided as a matter of NEPA, but legal requirements that agencies engage in cost-benefit analysis (statutory requirements or the generic Presidential order) are a different matter. Part I of the Article argues that fear assessment should be part of the practice of CBA by environmental, health, and safety agencies, at least in a nontrivial set of cases.<sup>33</sup> The remainder of

- 31. Id. at 776-77,
- 32. See infra Part III.

This Article's focus is CBA. On the related problem of quantifying fear, anxiety, and other mental states for purposes of environmental impact assessment or "social impact assessment," see Hillary S. Egna, Psychological Distress as a Factor in Environmental Impact Assessment: Some Methods and Ideas for Quantifying this Intangible Intangible, 15 ENVIL. IMPACT ASSESSMENT REV. 115 (1995); Kurt Finsterbusch, Psychological Impact Theory and Social

<sup>33.</sup> I and others have suggested that agencies should include fear-reduction benefits in cost-benefit analysis. See Adler, supra note 1, at 1395–1401; Eric A. Posner, Fear and the Regulatory Model of Counterterrorism, 25 HARV. J.L. & PUB. POL'Y 681, 687–88 (2002); Cass R. Sunstein, Cognition and Cost-Benefit Analysis, in Cost-Benefit Analysis: LEGAL, ECONOMIC, AND PHILOSOPHICAL PERSPECTIVES 223, 258 (Matthew D. Adler & Eric A. Posner eds., 2001). Indeed, Thomas Schelling suggested as much almost forty years ago in his seminal work on monetizing death. T. C. Schelling, The Life You Save May Be Your Own, in PROBLEMS IN PUBLIC EXPENDITURE ANALYSIS 127, 145–46 (Samuel B. Chasc, Jr. ed., 1968). The current article builds on these suggestions, and on a very small theoretical and empirical literature in economics that addresses how a money measure of fear should be constructed and seeks to estimate fear's monetary (dis)value. See Mordechai Shechter, Incorporating Anxiety Induced by Environmental Episodes in Life Valuation, in 2 APPLIED BEHAVIOURAL ECONOMICS 529 (Shlomo Maital cd., 1988); M. Shechter & M. Zeidner, Anxiety: Towards a Decision Theoretic Perspective, 43 BRIT. J. MATH. & STAT. PSYCH. 15 (1990); sources cited infra notes 140, 150–51.

[Vol 79:977

984

the Article explores the subtleties of pricing fear. Part II argues, with some qualifications, for *unbundled valuation*. In other words, the cost of fear and anxiety plausibly should be measured separately from the cost of those physical events (death, injury, illness) that are the objects of fear and anxiety states. Two sorts of methodologies are generally used by cost-benefit analysts to ascribe costs and benefits: revealed-preference studies and contingent-valuation studies. In Part III, I suggest that the latter technique is best suited to measuring the unbundled cost of fear and anxiety. The contingent-valuation technique is an interview technique: the respondent is asked whether he or she would be willing to pay a certain sum of money for a benefit, or willing to accept a certain sum in return for a welfare-setback.

Part IV discusses some foundational issues relevant to the design of contingent-valuation studies for valuing fear. Who participates in the study (fearful people, or rather calm people who can remember or imagine being fearful)? What is being valued: feared events, or the fear state itself? How should we untangle the intrinsic hedonic cost of fear from its instrumental effects (for example, the way anxiety can ruin relationships, hinder consumption, slow the growth of wealth, or interfere with careers)? Part IV also considers the indirect, QALY-to-dollars technique for monetary valuation that health economists increasingly employ, and that the FDA used to price fear in the gloves rulemaking. This technique is appropriate, I suggest, but only if the QALY scale is truly a welfare scale. Money, within CBA, functions as the universal metric for well-being. QALYs can function this way too, but too often researchers conceptualize the QALY scale as a measure of "health" rather than of well-being.

It is common for theorists of risk regulation to argue that agencies should be responsive to the "dread" of the citizenry. Lay and expert judgments of risk differ; this difference arises because lay judgments of the riskiness of a hazard track not merely the aggregate fatalities that are expected to result from the hazard, but the hazard's familiarity, controllability, and, crucially, how "dreaded" it is; and a democratic practice of risk regulation should hinge, in turn, on popular perceptions of riskiness.<sup>34</sup> This is a familiar line of analysis; my

Impacts, 1 Impact Assessment Bull. 71 (1982); John Lounsbury et al., Psychosocial Assessment, in Social Impact Assessment Methods 215 (Kurt Finsterbusch et al. eds., 1983).

<sup>34.</sup> See Cass R. Sunstein, The Laws of Fear, 115 HARV. L. REV. 1119, 1144–60 (2002) (describing and criticizing Paul Slovic's populist approach to risk regulation); K. S. SHRADER-FRECHETTE, RISK AND RATIONALITY: PHILOSOPHICAL FOUNDATIONS FOR POPULIST REFORMS 89–99 (1991).

argument is very different. The account presented here is technocratic, not democratic. Risk regulation should track social welfare, not popular risk perceptions. CBA is a technocratic tool for maximizing social welfare. Yet technocratic risk regulation need not focus narrowly on mortality and morbidity. It should focus (prima facie) on all constituents of welfare, including fear and anxiety.

In effect, my view lies between the democrats' and the naive technocrats'. Popularly perceived risk should not determine risk regulation; the anxiety and dread that flow from popular risk perceptions is simply one welfare impact among the multitude of costs and benefits flowing from hazards; but neither should risk regulation reduce to counting deaths or injuries, to a crude minimization of physical impacts or a simplistic balancing in which death- and injury-reduction are the sole regulatory benefits that are seen to counterbalance compliance costs.

#### I. DEFENDING FEAR ASSESSMENT

What is fear? Philosophers nowadays tend to analyze fear as a package of belief, desire, physical arousal, and unpleasant affect.<sup>35</sup> P is afraid if he (1) believes that he may be harmed and wants not to be harmed (paradigmatically if he believes that some physical change to his body, which he strongly disprefers, may occur); (2) experiences physical arousal such as rapid heartbeat, perspiration, or upset stomach, as a result of the belief that harm may occur; and (3) also experiences an ineffable feeling or sensation of distress. Anxiety is, intuitively, different from fear. The difference may be that anxiety is targeted at a harm that the subject believes he lacks any ability to flee; or that the object of anxiety is more "indefinite" than the object of fear, in the sense that the anxious subject lacks a clear picture of the possible harm or a clear understanding of its likelihood.<sup>36</sup> Fear and anxiety, in turn, are different from phobia. Fear and anxiety

<sup>35.</sup> See Wayne A. Davis, The Varieties of Fear, 51 PHIL. STUD. 287 (1987). Philosophical accounts similar to Davis's are cited in Adler, supra note 1, at 1377 n.229. The psychological literature on fear and anxiety is large and heterogeneous. Its various subliteratures focus on one or another component of full-blown fear (the cognitive, behavioral, affective, or somatic component), or on some combination of these. For summaries, see DAVID H. BARLOW, ANXIETY AND ITS DISORDERS: THE NATURE AND TREATMENT OF ANXIETY AND PANIC (1988); Arne Ohman, Fear and Anxiety as Emotional Phenomena: Clinical Phenomenology, Evolutionary Perspectives, and Information-Processing Mechanisms, in HANDBOOK OF EMOTIONS 511 (Michael Lewis & Jeannette M. Haviland-Jones eds., 2000).

<sup>36.</sup> See Ohman, supra note 35, at 512; IAIN WILKINSON, ANXIETY IN A RISK SOCIETY 18-21 (2001).

entail a full-fledged *belief* that harm might occur; by contrast, phobia is a state of distress and arousal triggered by the mere thought of possible harm.<sup>37</sup> I desire not to fall from the high building, but know that, given the high guard-rail in front of me, I will not. Still, I am phobically aroused and upset.

In this Article, I argue that environmental, health, and safety agencies should engage in fear assessment: they should quantify and monetize the fear states that would result from regulatory choices. The analysis carries over to anxiety; to phobia states (for example, phobias concerning a nuclear plant that nearby residents believe to be quite safe, but can't help thinking about in a fearful way); and to all other structurally similar mental states, such as dread, worry, apprehension, panic, or terror, wherein the subject's cognition (thought or belief) about the possibility of his being harmed is married with a desire not to be harmed, with physical arousal, and with a sense of distress. The terms "fear" and "anxiety" are used below to refer to fear in the strict sense, to anxiety in the strict sense, and to phobia, dread, apprehension, worry, terror, panic, and other such cognitive/conative/physiological/affective hybrids.<sup>38</sup>

What about other welfare-reducing mental states, such as sadness, depression, misery, demoralization, anomie, boredom, and many others? For that matter, what about welfare-enhancing mental states, like cheerfulness, happiness, serenity, excitement, and pleasure?<sup>39</sup> Shouldn't agencies generally engage in a broad practice of

<sup>37.</sup> This distinction between fear and phobia builds on a salient distinction within the philosophical literature on fear—the distinction between belief and mere thought—and may not track the way psychologists differentiate the two states. See John Deigh, Cognitivism in the Theory of Emotions, 104 ETHICS 824, 835–42 (1994); John Morreall, Fear Without Belief, 90 J. PHIL. 359 (1993); Kendall L. Walton, Fearing Fictions, 75 J. PHIL. 5, 6–10 (1978). The belief/thought distinction has welfare relevance; but since both phobia and fear are harmful compared to a calm baseline, and closely related if not identical mental states, I do not emphasize the fear/phobia distinction in my analysis below. See Adler, supra note 1, at 1383–84.

<sup>38.</sup> I focus on fear rather than "stress," which is not a type of mental state but rather a fuzzier category used to refer to the range of welfare effects, physiological as well as psychic, and sometimes if not often positively rather than negatively valenced, that "stressful"—demanding—events can have on persons. Anxiety is one psychic aspect of stress. On stress, see generally FIONA JONES & JIM BRIGHT, STRESS: MYTH, THEORY AND RESEARCH (2001); MEASURING STRESS: A GUIDE FOR HEALTH AND SOCIAL SCIENTISTS (Sheldon Cohen et al. eds., 1995).

<sup>39.</sup> See Arthur A. Stone, Measurement of Affective Response, in MEASURING STRESS: A GUIDE FOR HEALTH AND SOCIAL SCIENTISTS, supra note 38, at 148, 151-53 (categorizing a wide range of specific affective states as combinations of two dimensions, "positive affectivity" and "negative affectivity").

hedonic assessment, including but not limited to fear assessment?<sup>40</sup> This seems incorrect. As discussed at greater length below, the proper scope of fear assessment (and, by extension, of hedonic assessment) is limited by deliberation costs. And fear is sufficiently different from other harmful (to say nothing of beneficial) mental states, both in its causal linkage to agency choice and in its welfare impact, that in some choice situations agencies will be justified in engaging in fear assessment but not a broader hedonic assessment. The causal difference has to do with the cognitive component of fear states. Fear states partly consist in thoughts or beliefs about risky things, including the serious hazards regulated by environmental, health, and safety agencies. Regulatory mitigation of these hazards will tend to have a more direct causal effect on fear and anxiety—or at least a different kind of causal effect—than on welfare-reducing states, such as sadness or listlessness, that are not essentially cognitive.<sup>41</sup>

Further, given the welfare difference between fear and other mental states, in other situations agencies will be justified in conducting fear assessment as a *component* of hedonic assessment, *i.e.*, in using fear/anxiety, rather than some more generic grouping, as one particular type of hedonic impact—with its own particular unit cost—that agency choices might have. Finally, the cognitive component of fear makes the pricing of fear states especially tricky. In short, fear assessment should plausibly be a separable component of hedonic assessment, and I therefore analyze it separately in this Article.

So much for the nature of fear. Why incorporate fear costs within CBA?

Overall welfare is a morally important, if not conclusive, consideration bearing on governmental choice.<sup>42</sup> CBA is in many cases the optimal decision-procedure for a governmental official concerned to

<sup>40.</sup> See Bruno S. Frey & Alois Stutzer, Happiness and Economics: How the Economy and Institutions Affect Well-Being 175–77 (2002).

<sup>41.</sup> Toxins could also cause fear and related mental states through a physiological rather than cognitive mechanism, by producing physiological changes that in turn produce negative affects and other components of fear. See Moshe Zeidner & Mordechai Shechter, Psychological Responses to Air Pollution: Some Personality and Demographic Correlates, 8 J. ENVIL. PSYCHOL. 191, 205 (1988). But see Evelyn Bromet et al., Psychosocial Correlates of Occupational Lead Exposure, in 6 ADVANCES IN ENVIRONMENTAL PSYCHOLOGY 19, 28 (Allen H. Lebovits et al. eds., 1986). Fear thus produced, like fear produced through risk perceptions or other cognitions, is costly and thus (at least prima facie) should be included in fear assessment. Conceivably, if prediction costs differ substantially for the two kinds of fear, CBA might justifiably incorporate one but not the other.

<sup>42.</sup> See Matthew D. Adler, Beyond Efficiency and Procedure: A Welfarist Theory of Regulation, 28 FLA. St. U. L. Rev. 241, 302–13 (2000); Matthew D. Adler & Eric A. Posner, Rethinking Cost-Benefit Analysis, 109 YALE L.J. 165, 209–16 (1999).

determine which of the choices open to her maximizes overall wellbeing.43 "Costs" and "benefits," for CBA purposes, are improvements and setbacks with respect to welfare. So if fear/anxiety is a kind of welfare setback, there is a prima facie case for including fear/anxiety costs within the CBA analysis. And, clearly, fear/anxiety is a welfare setback. The law has long recognized this in areas other than administrative practice: for example, in the ancient tort of assault; in the more modern emotional-distress torts (epitomized by intentional fearinfliction, although unlike assault not limited to fear-infliction); and in the compensability of fear as a component of pain and suffering damages. 44 Although the nature of well-being remains contested—the long scholarly debate about hedonic versus preferentialist versus objectivist accounts of welfare continues unabated—fear is a welfare-setback on all of these accounts.45 Fear, like pain, essentially involves an unpleasant feeling. So only the masochist could prefer to be anxious; normal types typically prefer the opposite. And the best objectivist accounts, such as Martha Nussbaum's, 46 recognize emotional and psychological well-being as one dimension of human welfare; they also recognize other dimensions (such as friendship, professional accomplishment, or aesthetic experience) that fear or anxiety would tend to interfere with.

I have recently come to the view that the relevant account of human well-being, for CBA purposes, is an objectivist account—not a preferentialist or hedonic account. CBA, again, implements overall welfare. But overall welfare depends on the balance of objective goods and bads. Except in the special case where one governmental choice is Pareto-superior—a case rarely if ever encountered by regulatory agencies—individual preferences provide no basis for determining which choice maximizes aggregate welfare.<sup>47</sup> And hedonic views of welfare are just too narrow. Hedonism, for example, would not recognize the forced inactivity of a person crippled by fear as a grave intrinsic welfare loss additional to the hedonic cost of her fear. Still, it is worth emphasizing that my prima facie case for

<sup>43.</sup> See Adler & Posner, supra note 42, at 225–43; Matthew D. Adler & Eric A. Posner, Implementing Cost-Benefit Analysis When Preferences are Distorted, in COST-BENEFIT ANALYSIS, supra note 33, at 269, 272–80.

<sup>44.</sup> See Adler, supra note 1, at 1380.

<sup>45.</sup> For a summary of these accounts and the philosophical debate about them, see id. at 1303-10.

<sup>46.</sup> See Martha C. Nussbaum, Women and Human Development: The Capabilities Approach 34– $110\ (2000)$ .

<sup>47.</sup> See Adler, supra note 42, at 289-96.

governmental fear assessment holds good across all the standard welfare theories, not just objectivism.

This case holds good, I think, whether or not the fear takes the form of classic fear or anxiety as opposed to phobia, and—in the case of classic fear or anxiety—whether or not the belief component of the fear is rational or irrational. Jim is irrationally certain that his chance of dying on a bumpy airplane ride is one in one hundred, and is quite distressed during the six hour ride. June rationally believes that the chance of dying from a immunological disease, with which she has just been diagnosed, is one in one hundred, and like Jim is quite distressed for the six hours until she learns that the diagnosis was erroneous. Both Jim and June suffer welfare losses, I suggest, on the objectivist as well as hedonic and preferentialist views of welfare. Arguably, June's loss is greater, since her distress is epistemically warranted while Jim's is not.48 Were fear assessment wonderfully refined, that difference might be attended to by regulators. But a flat refusal to see irrational fear as a welfare setback and thus a kind of cost that, prima facie, should be incorporated in CBA, would be mistaken.

If fear is a welfare setback, why shouldn't agencies price it? What would overcome the prima facie case just presented for including fear costs in CBA? One worry concerns quantification: that the fear states resulting from governmental choices cannot be characterized in numerical terms, and thus cannot be valued monetarily and incorporated in the overall calculus of costs and benefits. I agree that fear must be quantified before it can be priced, but deny that quantification (as such) is a problem. At a minimum, individuals can be placed in the complementary categories of fearful or unafraid, anxious or not, and quantities such as fear-hours or anxiety-days (the aggregate time during which individuals are in the negative psychological state) can be measured. This is what the FDA did in the gloves rulemaking.49 In fact, much more finely calibrated scales for measuring fear and anxiety are standardly used by psychiatrists and experimental psychologists, such as the Spielberger State-Trait Anxiety Inventory, the Hamilton Anxiety Rating scale, the Beck Anxiety Inventory, and the Covi Anxiety Scale.<sup>50</sup> These scales, administered by observers or

<sup>48.</sup> See Adler, supra note 1, at 1382-84.

<sup>49.</sup> See Medical Devices; Patient Examination and Surgeons' Gloves; Test Procedures and Acceptance Criteria, 68 Fed. Reg. 15,404, 15,413 (Mar. 31, 2003).

<sup>50.</sup> See Practitioner's Guide to Empirically Based Measures of Anxiety (Martin M. Antony et al. eds., 2001); Eric D. Peselow, Outcome Measurement in Anxiety Disorders, in Outcome Measurement in Psychiatry: A Critical Review 191 (Waguih William

990

by subjects themselves, assign numbers to fear states, depending on some function of the observed or self-reported mix of somatic, affective, and cognitive states experienced by the fearful subject plus his behaviors.<sup>51</sup> And the scales, or at least some of them, are seen by scholars in the field to be reasonably "reliable" (in the sense of producing replicable results) and "valid" (in the sense of tracking the states they purport to measure).<sup>52</sup>

An external skeptic might object that fear/anxiety scales, perhaps psychometric scales in general, cannot be valid, regardless of what the psychologists and psychiatrists might believe. Ascribing numbers to fear states is a meaningless exercise. But the objection is misconceived. Numbers measuring the subject's arousal are validated by the physiological states constitutive of arousal: the heart rate, the amount of perspiration, the breathing speed. Numbers measuring the subject's desires (how intensely does he disprefer the physical impact that he fears) and beliefs (to what degree does he believe that the impact will occur) are validated, respectively, by his utilities and by his subjective probabilities. For more than half a century, since the seminal work of von Neumann, Morgenstern, and Savage, economists have accepted that preference and belief can be measured on cardinal scales.53 Skepticism is perhaps most plausible with respect to the scaling of the affective component of fear.54 What does it mean to say that Sally's degree of distress rates 8 on a 0-10 scale? I will bracket the question of whether it is meaningful to speak of affective intensity apart from welfare. At a minimum, subjects can be asked (in principle) to rate affective states on a cardinal scale, with the top number representing maximum well-being, and the bottom number minimum well-being, using the standard gamble technique deriving (once more) from von Neumann and Morgenstern and now popular within the QALY literature.55 Health economists accept that the intensity of a headache,

IsHak et al. eds., 2002); M. Katherine Shear et al., *Anxiety Disorders Measures*, in HANDBOOK OF PSYCHIATRIC MEASURES 549 (Task Force for the Handbook of Psychiatric Measures ed., 2000).

<sup>51.</sup> Among other things, the subject's performance on tests of attention, memory and task completion may well be a useful measure of her anxiety. See Ben Searle et al., Cognition, Stress and Anxiety, in STRESS: MYTH, THEORY AND RESEARCH, supra note 38, at 89, 95–106.

<sup>52.</sup> See sources cited supra note 50 (discussing reliability and validity of anxiety scales).

<sup>53.</sup> See Matthew D. Adler, The Puzzle of "Ex Ante Efficiency": Does Rational Approvability Have Moral Weight?, 151 U. PA. L. REV. 1255, 1257 n.2 (2003) (citing sources).

<sup>54.</sup> See Stone, supra note 39 (discussing measurement of affect).

<sup>55.</sup> See infra text accompanying notes 175-79.

an angina attack, or bronchitis is cardinally measurable;<sup>56</sup> so, too, is the intensity of fear and anxiety.

The quantification objection to fear assessment is belied by a body of empirical work where standard anxiety scales, or similar instruments, are used to quantify anxiety and related psychological states associated with various hazards.<sup>57</sup> For example, Zeidner and Shechter used the Spielberger State-Trait Anxiety Inventory and another self-report anxiety scale to measure the correlation of anxiety with perceived and actual air pollution among residents of the Haifa Bay Area, an industrial region of Israel.<sup>58</sup> Gibbs used the Spielberger scale to study anxiety in the populations near landfills found to contain hazardous toxics.<sup>59</sup> Dohrenwend and his co-authors used the Demoralization Scale to quantify psychological distress resulting from the Three Mile Island accident.<sup>60</sup> The Demoralization Scale, like the Spielberger measure, is a self-report measure that asks about affects, cognitions, and perceived somatic states; it seeks to track all forms of distress, including but not limited to anxiety. Bachrach and Zautra used surveys incorporating the Demoralization Scale to determine the degree of distress among residents of Rainbow Valley, Arizona, site of a proposed hazardous waste site.61 Markowitz and Gutterman used the scale to measure distress in Staten Island, New York and Linden-Perth Amboy, New Jersey, shortly after accidental releases of toxic chemicals near those communities.62 Lebovits and his co-authors in-

<sup>56.</sup> See generally Valuing Health for Policy: An Economic Approach (George Tolley et al. eds., 1994).

<sup>57.</sup> A related body of work quantifies the traumatic effect of disasters. See, e.g., Bonnie L. Green et al., Levels of Functional Impairment Following a Civilian Disaster: The Beverly Hills Supper Club Fire, 51 J. CONSULTING & CLINICAL PSYCH. 573 (1983); Ronald W. Perry, Environmental Hazards and Psychopathology: Linking Natural Disasters with Mental Health, 7 ENVTL. MGMT. 543 (1983).

<sup>58.</sup> See Zeidner & Shechter, supra note 41; see also id. at 191–92 (discussing other studies of the linkage between air pollution and anxiety or other negative mental states).

<sup>59.</sup> Margaret S. Gibbs, Psychological Impacts of Toxic Exposure in Third World Countries: An Extrapolation, 8 IMPACT ASSESSMENT BULL, 7, 9 (1990).

<sup>60.</sup> Bruce P. Dohrenwend, Psychological Implications of Nuclear Accidents: The Case of Three Mile Island, 59 BULL. N.Y. ACAD. MED. 1060 (1983); Bruce P. Dohrenwend et al., Stress in the Community: A Report to the President's Commission on the Accident at Three Mile Island, 365 ANNALS N.Y. ACAD. SCI. 159 (1981).

<sup>61.</sup> Kenneth M. Bachrach & Alex J. Zautra, Assessing the Impact of Hazardous Waste Facilities: Psychology, Politics, and Environmental Impact Statements, in 6 ADVANCES IN ENVIRONMENTAL PSYCHOLOGY; EXPOSURE TO HAZARDOUS SUBSTANCES: PSYCHOLOGICAL PARAMETERS 71 (Allen H. Lebovits et al. eds., 1986) [hereinafter ADVANCES IN ENVIRONMENTAL PSYCHOLOGY].

<sup>62.</sup> Jeffrey S. Markowitz & Elane M. Gutterman, Predictors of Psychological Distress in the Community Following Two Toxic Chemical Incidents, in 6 ADVANCES IN ENVIRONMENTAL PSYCHOLOGY, supra note 61, at 89.

terviewed asbestos workers and controls to determine the correlation between perceived health risk and psychopathology; psychopathology was quantified with the Current and Past Psychopathology Scales, an observer-rated scale that includes a subscale for depression and anxiety. Davidson and her co-authors compared stress among persons living near Three Mile Island to controls by using three different measures: a self-report measure of psychological stress, the Symptom Checklist-90, which covers anxiety, fear, depression, and related states; a behavioral measure of persistence and concentration, on the theory that stress impairs both (subjects were asked to solve a puzzle and complete a proofreading task); and a urine sample for elevated levels of epinephrine and norepinephrine.

So much for quantification. A different objection concerns uncertainty. A hazard will cause some distribution of fear states in the population, and these states can (in principle) be measured on a numerical scale like the Spielberger State-Trait Anxiety Inventory. But regulators will never be in a position to know what the true distribution is—or so the objection goes. Yet uncertainty is a pervasive feature of regulatory choice. Risk assessors, for example, are always uncertain about the number of deaths that would result from hazards. Consider a carcinogenic toxin in a waste dump. There are a wide range of possible exposure scenarios, by which the toxin is spread to larger or smaller groups of persons in larger or smaller

<sup>63.</sup> Allen H. Lebovits et al., The Case of Asbestos-Exposed Workers: A Psychological Evaluation, in 6 ADVANCES IN ENVIRONMENTAL PSYCHOLOGY, supra note 61, at 3.

<sup>64.</sup> Laura M. Davidson et al., Toxic Exposure and Chronic Stress at Three Mile Island, in 6 ADVANCES IN ENVIRONMENTAL PSYCHOLOGY, supra note 61, at 35. Andrew Baum, a coauthor on this study, published several other similar quantitative studies of the psychological effects of Three Mile Island. See Andrew Baum et al., Emotional, Behavioral, and Physiological Effects of Chronic Stress at Three Mile Island, 51 J. Consulting & Clinical Psych. 565 (1983); Andrew Baum et al., Stress at Three Mile Island: Applying Social Psychology to Psychological Impact Analysis, in 3 APPLIED SOCIAL PSYCHOLOGY ANNUAL 217 (1982). Further scholarship in this vein includes the Dohrenwend studies mentioned supra, note 60; John Sorensen et al., Impacts of Hazardous Technology: The Psycho-Social Effects of Restarting TMI-1 (1987); the studies summarized in U.S. Nuclear Regulatory Commission, Workshop on Psychological Stress Associated with the Proposed Restart of Three Mile Island, Unit 1, 18–31 (1982); and studies cited in Markowitz & Gutterman, supra note 62.

<sup>65.</sup> On the topic of uncertainty in risk assessment, see, e.g., ALISON C. CULLEN & H. CHRISTOPHER FREY, PROBABILISTIC TECHNIQUES IN EXPOSURE ASSESSMENT: A HANDBOOK FOR DEALING WITH VARIABILITY AND UNCERTAINTY IN MODELS AND INPUTS (1999); M. Granger Morgan, Uncertainty Analysis in Risk Assessment, 4 HUMAN & ECOL. RISK ASSESSMENT 25 (1998); Elisabeth Paté-Cornell, Risk and Uncertainty Analysis in Government Safety Decisions, 22 RISK ANALYSIS 633 (2002); Pamela R. D. Williams & Dennis J. Paustenbach, Risk Characterization, in HUMAN AND ECOLOGICAL RISK ASSESSMENT: THEORY AND PRACTICE 293, 336–45 (Dennis J. Paustenbach ed., 2002).

quantities, depending both on the physics of the "fate and transport" of the carcinogen away from the dump and the demographics of the surrounding population. It is also highly uncertain, for a given population exposed to a given amount of the carcinogen, what the aggregate number of resulting deaths will be; the mechanisms of cancer remain unclear, and even taking as given one or another causal model of cancer, the degree of toxicity of a particular substance (in effect, a model parameter) will not be known with certainty. None of this is a conceptual obstacle to CBA (bracketing deliberation costs, a point to which I will return in a moment). For example, probabilities can be assigned to each exposure scenario, and to each possible number of aggregate premature deaths within each scenario, and can be combined using probability theory to predict a mean number of deaths—then used as an input for CBA.

Parallel techniques can be imagined for handling uncertainty within fear assessment. Assume that the basic unit that agencies properly employ for quantifying fear is the fear-day: a day during which the individual is substantially more fearful or anxious than population norms.66 This is just the kind of unit now regularly employed by agencies and health economists for cost-benefit analysis of acute physical morbidities such as headaches, angina, congestion, coughing, sneezing, nausea, or eye irritation. Monetary prices are assigned to headache-days, angina-days, congestion-days, etc.67 For a given person (characterized by the fear assessor, in more or less detail, to include some if not all68 of the characteristics that might influence fearfulness, such as her personality makeup, her awareness of the hazard being evaluated for regulation, her physical proximity to the hazard, its social salience, etc.) and a given day and a given regulatory choice (either the baseline choice of inaction or some other regulatory choice), the assessor can ascribe a probability that the

<sup>66.</sup> Agencies could perhaps use the fear-day unit to capture the instrumental as well as intrinsic costs of fear, by ignoring the dependency of instrumental costs on subjects' nonhedonic as well as hedonic characteristics, and assuming a simple, linear correlation between the number of fear-days each subject experiences and fear's instrumental costs for him or her. However, fear-days would more naturally be used to capture merely the intrinsic cost of fear. On the intrinsic/instrumental distinction, see *infra* Part IV.A.

<sup>67.</sup> See F. Reed Johnson et al., Valuing Morbidity: An Integration of the Willingness-to-Pay and Health-Status Index Literatures, 16 J. HEALTH ECON. 641, 644–45, 650–51 (1997); George Tolley et al., State-of-the-Art Health Values, in VALUING HEALTH FOR POLICY: AN ECONOMIC APPROACH, supra note 56, at 323, 329–36.

<sup>68.</sup> Deliberation costs would warrant agencies in undertaking a limited rather than more complete description of the traits of the various persons whose anxiety levels could be affected by agency choices. On deliberation costs, see *infra* text accompanying notes 83–89.

994

person will be fearful on that day. From these probability ascriptions, the agency can determine, for each regulatory choice and each person, the mean number of fear-days that the person might experience. Summing across the population, the assessor can determine the mean incremental number of total fear-days that might occur as a result of each regulatory option, relative to baseline.

Standard monetary values for the value of avoiding a fear-day—analogous to the standardized values for avoiding premature death that agencies are beginning to employ,<sup>69</sup> and the standardized monetary values for avoiding morbidity that are also now emerging<sup>70</sup>—can be calculated, using the contingent-valuation techniques I will discuss below. These monetary values can be combined with the estimates of total incremental fear-days to produce a total monetized fear cost or benefit for each regulatory option, relative to baseline. For example, if the standard value for avoiding a fear-day is \$50, and the mean number of total fear-days that might occur if some regulatory option were chosen is 100,000 less than the mean baseline number of total fear-days, the total value of fear-saving is \$5 million (\$50 multiplied by 100,000).

The format for fear assessment just described is robust with respect to uncertainty, and seems quite plausible because it parallels techniques currently employed by agencies for quantifying and pricing mortality and morbidity. Different formats can also be imagined: for example, measuring fear in units more finely or coarsely calibrated than fear-days; allowing the cost of a fear-day to vary with the subject's wealth, age, and other characteristics, rather than using a standard value; or directly pricing the lotteries over fear states produced for each individual by each regulatory option rather than using those lotteries to derive a mean number of fear-days and then pricing those days. These, too, are robust with respect to uncertainty.

I have thus far rebutted the quantification and uncertainty objections to fear assessment. Skeptics might also worry about *causality*. The quantifiability of fear is necessary but insufficient for fear assessment: the analyst needs to predict the fear states that will be caused by hazards and abated by regulatory intervention. But what, really, is the objection here? Causal models linking hazards and fear states can surely be developed. These can be rough, informal, "folk"

<sup>69.</sup> See, e.g., Donald Kenkel, Using Estimates of the Value of a Statistical Life in Evaluating Consumer Policy Regulations, 26 J. CONSUMER POLICY 1 (2003) (surveying agency practice).

<sup>70.</sup> See sources cited supra note 67.

models. The FDA in the gloves rulemaking relied, in effect, on a folk model of fear-causality: it assumed, without formal modeling, that an event sufficiently elevating an individual's perceived probability of infection by blood-borne pathogens to prompt her to undergo testing would cause a fear state in her, lasting until the time that infection was ruled out. More formal models are also possible, no less here than for other social and psychological phenomena. For example, in their study of the psychological effects of the Three Mile Island accident, John Sorensen and his co-authors employed a multi-factorial model that correlated an individual's fear with his or her distance from the plant, socio-economic status, family size, trust in plant management, and other factors.<sup>71</sup>

To be sure, given the contested state of social and psychological science, experts have not converged (and cannot be expected to converge any time soon) on a single, consensus model linking hazards and fear states. Some of the literature on risk perception suggests that perceived differences in the riskiness of hazards (and, by extension, differences in resulting fear states) are produced by a rich, lay normative framework that focuses on generic features of hazards, such as controllability, familiarity, and inequity of the resulting distribution of fatalities.<sup>72</sup> By contrast, other work emphasizes the role of various biases or mistakes in producing popular perceptions. On this view, citizens evaluate hazards (and, by extension, would tend to fear hazards) by engaging in an intuitive, but often quite inaccurate, costbenefit analysis.73 Yet a different strand in the scholarship sees fearcausation as a dynamic, social process, involving the "availability" heuristic and informational or reputational "cascades" manipulated by political entrepreneurs.74

<sup>71.</sup> See SORENSEN ET AL., supra note 64, at 95–121.

<sup>72.</sup> See generally PAUL SLOVIC, THE PERCEPTION OF RISK (2000).

<sup>73.</sup> See generally HOWARD MARGOLIS, DEALING WITH RISK: WHY THE PUBLIC AND THE EXPERTS DISAGREE ON ENVIRONMENTAL ISSUES (1996).

<sup>74.</sup> See Timur Kuran & Cass R. Sunstein, Availability Cascades and Risk Regulation, 51 STAN. L. REV. 683 (1999). Yet further models exist. For example, Mary Douglas and Aaron Wildavsky's "cultural" theory asserts that different modes of risk perception—for example, a tendency to fear economic collapse, or instead environmental damage—are associated with different social groups. See Mary Douglas & Aaron Wildavsky, Risk and Culture: An Essay on the Selection of Technical and Environmental Dangers (1982). For an everview of current causal models of risk perception, see Social Theories of Risk (Sheldon Krimsky & Dominic Golding eds., 1992); Nick F. Pidgeon & Jane Beattie, The Psychology of Risk and Uncertainty, in Handbook of Environmental Risk Assessment and Management 289 (Peter Calow ed., 1998).

996

But the plurality of possible causal models of the hazard-fear linkage simply represents one kind of uncertainty. Here, too, the analogy to risk assessment is reasonably straightforward. Continuing scientific uncertainty about cancer mechanisms has produced a plurality of formal models of carcinogenicity: specifically, a plurality of types of "dose-response" curves that correlate an individual's incremental cancer risk with her degree of exposure to a carcinogen. The possible dose-response models include the log-probit, logit, Weibull, one-hit, multihit, and multistage models, to name only the most common.75 This plurality has not stopped risk assessment, since various decision-theoretic techniques for handling model uncertainty (like other kinds of uncertainty) exist and can be incorporated within CBA. A highly sophisticated technique is so-called Delphi analysis. where experts in the field—in the case of fear assessment, sociologists and psychologists who research hazard perception—are systematically polled to determine the range of plausible causal models and then the subjective probabilities that each expert ascribes to each model, with the probabilities averaged or otherwise integrated to produce a probability distribution across the models.76 A cruder technique is to adopt the model that (the decisionmaker believes) is best supported by the evidence. This was Sorensen's approach in his study of Three Mile Island's psychological impacts, and has been the EPA's approach to risk assessment. The EPA's current guidelines presumptively require that risk assessors employ the so-called "linearized multistage" model in drawing dose-response curves.77

A different problem regarding causality in fear assessment concerns causal inertness. The worry here is not that models of fear-causation can't be constructed, or are uncertain, but rather that the best model will predict fear states in the populace to be insensitive to regulatory choice. Consider the Alar scare. After fear entrepreneurs

<sup>75.</sup> See Vincent T. Covello & Miley W. Merkhofer, Risk Assessment Methods: Approaches for Assessing Health and Environmental Risks 166 (1993).

<sup>76.</sup> See generally ROGER M. COOKE, EXPERTS IN UNCERTAINTY: OPINION AND SUBJECTIVE PROBABILITY IN SCIENCE (1991). Studies that have employed Delphi analysis to estimate carcinogen potency in the teeth of uncertainty about the shape of dose-response curves and other kinds of causal uncertainty include John S. Evans et al., A Distributional Approach to Characterizing Low-Dose Cancer Risk, 14 RISK ANALYSIS 25 (1994); John S. Evans et al., Use of Probabilistic Expert Judgment in Uncertainty Analysis of Carcinogenic Potency, 20 REGULATORY TOXCIOLOGY & PHARMACOLOGY 15 (1994); William E. Fayerweather et al., Quantifying Uncertainty in a Risk Assessment Using Human Data, 19 RISK ANALYSIS 1077 (1999).

<sup>77.</sup> See Guidelines for Carcinogen Risk Assessment, 51 Fed. Reg. 33,992, 33,997-98 (Sept. 24, 1986).

publicized the alleged cancer dangers of the apple pesticide Alar, many consumers became fearful of apples.78 Consumers experienced fear states that were targeted at apples: fear states bundling together the consumer's desire not to get cancer, with the belief that an apple or apple-containing product might result in cancer, plus attendant distress and arousal. Still, a regulator faced with the choice of banning Alar or leaving Alar on the market79 might believe that the total number of fear-days would be unaffected by the choice. To be sure, if Alar were withdrawn, consumers would experience fewer fear states targeted at Alar. But this reduction would be roughly balanced (the regulator might believe) by additional fear states targeted at other products. The regulator might have two general grounds for believing risk regulation (in some area) to be causally inert with respect to overall fear. The first is the psychological thought that many people are dispositionally anxious; they tend to find something or other to be anxious about, and their overall level of anxiety remains pretty much the same, with different objects rationalizing an ongoing anxiety state.80 The second is the social thought that, given the constraints of individual attention and intersubjective communication, only a few hazards (such as Alar) can be socially salient at any one time, and conversely that informational cascades manipulated by fear entrepreneurs,81 or other such mechanisms, will always cause the available slots for socially salient hazards to be filled. If Alar is banned, it will be genetically modified foods, or fatty foods, or some other "hazard of the month" that will become the target of widespread fears.

The causal-inertness objection to fear assessment is a serious one. Some empirical studies of the fear/anxiety effects of hazards have concluded that the hazards examined had little effect on the aggregate amount of fear—although this is hardly a universal finding.<sup>82</sup> In any event, it is important to see that the causal-inertness objection to

<sup>78.</sup> See Kuran & Sunstein, supra note 74, at 698-701 (describing the Alar scare).

<sup>79.</sup> As it turned out, Alar was withdrawn from the U.S. market by its manufacturer. See id. at 699.

<sup>80.</sup> See, e.g., EUGENE E. LEVITT, THE PSYCHOLOGY OF ANXIETY 16 (2d cd. 1980) (distinguishing between "state anxiety (momentary and situational) and trait anxiety (a personality characteristic reflecting a high predisposition or proneness to experience state anxiety)").

<sup>81.</sup> See Kuran & Sunstein, supra note 74, at 685-88.

<sup>82.</sup> See Lebovits et al., supra note 63; see also Dohrenwend, Stress in the Community, supra note 60, at 174 (finding that Three Mile Island accident produced substantial demoralization in the community, which dissipated within two months of the accident). But see Gibbs, supra note 59, at 10 (finding that toxic exposures had longer-term psychological effects); Davidson et al., supra note 64, at 44 (finding that Three Mile Island accident had longer-term psychological effects).

998

fear assessment is essentially connected to the problem of deliberation costs. Assume that the deliberation costs of fear assessment are zero. It is costless for analysts to produce probability distributions across possible causal models of fear-production and, within each model, probability distributions across model parameters and inputs. The upshot is (say) a mean incremental number of fear-days that would occur if a given regulatory option were chosen, as compared with the baseline option of inaction. If the hazard being evaluated is causally inert with respect to fear, then this mean number should be roughly zero. But that estimate can emerge as the *upshot* of the fear assessment. The fact that, prior to undertaking a full-blown fear assessment, the analyst expects that the assessment will demonstrate overall fear to be unchanged by regulatory intervention, is no reason not to undertake the assessment—*if* the analyst also expects that the costs of performing the full-blown assessment are zero.

But of course expected deliberation costs, for any variant of policy analysis, are not zero. Thus the deliberation-cost objection to fear assessment: the most potent of all the objections, I tend to think. This objection subsumes various plausible claims about how the differences between physical and psychological harms justify their differential treatment within CBA. One such claim, as already mentioned, is that risk regulation is causally inert with respect to psychological but not physical harms. Another is that psychological harms, by contrast with physical harms, are relatively minor welfare setbacks. The aggregate benefits of mitigating the fears produced by workplace toxins are (perhaps) much less than the aggregate benefits of preventing the deaths these toxins cause. This fact or, more precisely, the decisionmaker's preanalytic belief83 that the fact is true, constitutes a reason to truncate CBA-to focus on physical but not psychological harmsonly if the expected costs of CBA itself are nonzero. A third is that, although regulators are uncertain both about the causal dependency of mortality on regulatory choice, and about the causal dependency of fear on regulatory choice, the latter uncertainty is deeper. There are more possible causal models to consider in the latter case, say-and thus greater deliberation costs involved in assigning probabilities to the possible outcomes of regulation.

<sup>83.</sup> I say "preanalytic" because the threshold balancing of the expected benefits of undertaking full-blown CBA with respect to some category of welfare impact, as against the expected deliberation costs of doing so, must be done in a rough and intuitive way to avoid incurring the very deliberation costs whose justifiability is being evaluated.

Deliberation costs mean that agencies should be selective in performing fear assessment, not that they should refrain entirely. Deliberation costs are a general problem for CBA<sup>84</sup> (although it could well be true that the ratio of deliberation costs to the benefits of full-blown deliberation are larger for fear assessment and other novel variants of CBA than for traditional policy analysis). Agencies currently employ formal CBA to evaluate only a small fraction of the choices for which CBA is statutorily permissible. The Presidential cost-benefit order demands that agencies produce a full written cost-benefit analysis, for OMB review, only in the case of agency rules (not other decisions) and only where the rules are "economically significant," that is, have annual costs exceeding \$100 million. This substantial limitation in the scope of the Presidential order is grounded in (or at least plausibly justified by) the deliberation costs of full-blown CBA, even sans fear assessment.

Deliberation costs-specifically, the kind of deliberation costs that present an objection to fear assessment or other novel types of CBA—derive from our bounded rationality. 86 The problem is not that CBA requires full information; I have emphasized that it does not. The problem, rather, is that the very task of characterizing possible outcomes, and assigning probabilities to them, is costly. Were our conceptual and mathematical abilities unbounded, the task would be costless. Bounded rationality, too, means that the meta-CBA I have entered into here-specifying the conditions under which agencies should perform various kinds of CBA-cannot be both fully rigorous and cost-effective. With that as an excuse for a lack of rigor, let me offer the following factors which plausibly should bear on an agency's decision to undertake fear assessment. (Whether these factors, or decision rules grounded on them, should be formalized in agency or OMB guidelines is an issue I will not pursue.) (1) The balance of nonpsychological costs and benefits. If the physical benefits of hazard mitigation, namely mortality- and morbidity-reduction, already justify agency intervention, fear assessment is unnecessary. In effect, fear assessment should be performed (if at all) as a sequel to traditional CBA. For example, the EPA does not need to evaluate the fearavoidance benefits of cleaning up a waste dump if it has already

<sup>84.</sup> See Adler & Posner, supra note 42, at 217-18.

<sup>85.</sup> Exec. Order No. 12,866  $\S$  3(f), 6(a)(3), 3 C.F.R. 638, 641 (1994), reprinted in 5 U.S.C.  $\S$  601 (2000).

 $<sup>86. \ \</sup>textit{See generally} \ \textsc{Herbert A. Simon, Models of Bounded Rationality} \ (3 \ vols. 1982–1997).$ 

1000

determined that the monetized value of the lives saved by the cleanup exceeds clean-up costs. (2) Population size. Is the population expected to be aware of the hazard, large or small? Ceteris paribus, a larger population means more fear. (3) Population fearfulness. Does the affected population fall in some general category that tends not to be fearful: workers that self-select into high-risk occupations, for example, as opposed to consumers or members of the general population exposed to pollution?87 It would be reasonable for the EPA or the Consumer Product Safety Commission to pursue fear assessment more aggressively than the Mine Safety Administration or OSHA. Alternatively, is the affected population so dispositionally fearful (sufferers from a generalized anxiety condition, say) that the elimination of particular fear-targets, such as regulated hazards, is unlikely to change the total amount of fear? (4) Dreaded hazards. Does the hazard fall in a general category that is especially dreaded? The wellknown empirical work undertaken by Paul Slovic and collaborators, quantifying the extent to which the population perceives various hazards to be risky,88 turns out to be potentially quite valuable for agencies-although surely not in the way that Slovic intended. Hazards with high generic perceived risks, such as pesticides, nuclear power, food additives, or industrial carcinogens, are more likely to be the object of fear states (ceteris paribus) than hazards with lower generic perceived risks, such as home power tools, bicycles, or sunbathing. Agencies might use Slovic's diagrams, or similar work, to decide when to undertake fear assessment. While it is silly for CBA analysts to give less weight to the deaths caused by power tools than by industrial carcinogens, it is not silly for analysts to recognize that power tools cause less psychological distress than carcinogens, and thus to attempt to quantify those fear states when carcinogens, not tools, are being regulated. (5) Hazard salience. Is the particular hazard socially salient? Measures of public attention (for example, the amount of media coverage) might be used as a partial trigger for fear assessment. Alar is, generically, no more dreaded than any other pesticide. This particular pesticide became the especial object of widespread fears because of social dynamics. The very fact of public attention to Alar might warrant the EPA in performing fear assessment only in the Alar proceeding, rather than in pesticide decisions more generally.

<sup>87.</sup> Cf. W. KIP VISCUSI, FATAL TRADEOFFS: PUBLIC AND PRIVATE RESPONSIBILITIES FOR RISK 42-47 (1992) (discussing heterogeneity in individual valuation of mortality risk).

(6) Causal inertness. Does the scholarly literature suggest that the hazard being evaluated is causally inert with respect to fear? This overlaps with the population-fearfulness factor, but is partly distinct, since there might be categories of hazards (particular consumer products or product-constituents, say) that are causally inert with respect to aggregate fear even in the general population.

Assume that the factors just described weigh in favor of fear assessment. Some regulatory option would eliminate or mitigate a hazard that is "dreaded" á la Slovic and salient to a sufficiently large population, neither particularly fearful nor particularly fearless; the regulator does not believe (preanalytically) that the hazard is causally inert with respect to fear; and the morbidity- and mortality-reduction benefits of the option are not alone enough to outweigh the costs, relative to baseline. In such a case—where the expected benefits of fear assessment are larger than expected deliberation costs—are there cogent objections to the practice? One objection is that communication and education rather than hazard regulation may be the optimal governmental technique, in many contexts, for reducing fear.89 Although the elimination or mitigation of a feared hazard might be cost-benefit justified given fear-reduction benefits, relative to the regulatory baseline of governmental inaction, perhaps the option of providing truthful and reassuring information to the public is in turn cost-benefit justified relative to the elimination/mitigation option, given avoided compliance costs. But this objection is not really an objection to fear assessment; rather, it shows that, where fear is at issue, regulators should use CBA (including fear assessment) to evaluate a wider array of policy alternatives than is traditional, including informational and educational as well as prescriptive options.

A different objection is that fear assessment is self-defeating in the long run. If agencies incorporate fear-reduction benefits in CBA, fear entrepreneurs will have an added incentive to make citizens fearful of the hazards that the entrepreneurs want eliminated.<sup>90</sup> This

<sup>89.</sup> See Posner, supra note 33, at 689–95 (describing range of regulatory instruments for reducing fear about terrorism); Sunstein, supra note 33, at 259 ("The appropriate [initial] response to social fear not based on evidence, and to related ripple effects, is education and reassurance rather than increased regulation.").

<sup>90.</sup> See Howard F. Chang, Risk Regulation, Public Concerns, and the Hormones Dispute: Nothing to Fear but Fear Itself? (unpublished paper, on file with author) (suggesting that WTO's risk assessment requirement is justifiable, notwithstanding social costs of popular fears unsupported by a risk assessment, in virtue of fear-creation incentive that special interests would have absent the WTP requirement).

1002

objection would be quite serious, I think, if agency decisions were insulated from legislative control, or if legislative decisions were themselves driven by CBA. Imagine a technocratic world in which both Congress and agencies conscientiously resist popular pressure and use CBA to reach their choices; in such a world, shifting from traditional CBA to a CBA that incorporates fear assessment could well end up, perversely, causing a greater amount of fear. For now, however, fear entrepreneurs have a large incentive to incite fear, regardless of the details of agency CBA, since agency decisions can always be reversed by legislators who are (predictably) sensitive to popular fears. Consider that fear-mongering is already a familiar part of the politics of environmental, health, and safety regulation even though agencies, with a very few exceptions, do not currently quantify and monetize fear.<sup>91</sup>

Finally, consider the objection to fear assessment expressed by the Supreme Court in the Three Mile Island case, Metropolitan Edison v. People Against Nuclear Energy. 92 The Court was concerned not only about the deliberation costs of quantifying fear, but also that "[ilt would be extraordinarily difficult for agencies to differentiate between 'genuine' claims of psychological health damage and claims that are grounded solely in disagreement with a democratically adopted policy."93 If the Court's objection is that psychometric instruments cannot distinguish between genuine fear of some hazard, and mere opposition to the hazard, even where respondents are truthful, this is clearly untrue. Attitudinal as opposed to anxiety scales focus on quite different somatic, behavioral, affective, and cognitive features of respondents. For example, William Freudenberg tested the Court's claim in Metropolitan Edison by surveying persons residing near a nuclear facility under construction in Washington State. The survey employed a scale of pro-nuclear attitudes (based on questions such as "Do you favor or oppose the construction of this nuclear plant?") and a psychological distress scale (based on questions such as "Do your hands tremble enough to bother you?"). Freudenberg found that opposition to the plant was uncorrelated with distress.94

<sup>91.</sup> See generally Barry Glassner, The Culture of Fear: Why Americans Are Afraid of the Wrong Things (1999); Frank Furedi, Culture of Fear: Risk-Taking and the Morality of Low Expectation (rev. ed. 2002).

<sup>92. 460</sup> U.S. 766 (1983).

<sup>93.</sup> Id. at 778.

<sup>94.</sup> William R. Freudenburg & Timothy R. Jones, Attitudes and Stress in the Presence of Technological Risk: A Test of the Supreme Court Hypothesis, 69 Soc. Forces 1143 (1991).

If the Court's objection, instead, is that respondents who strongly oppose or support regulation of some hazard will not be truthful in answering questions about their anxiety, the Freudenberg study suggests that that claim too is overblown. In any event, self-report fear surveys focused on the very hazard being evaluated for regulation (where the respondents' incentive to lie about anxiety would be strongest) are hardly the only tool for estimating the fear states that would be caused by the hazard. A different claim is that, where a person's desire for the regulation of some hazard leads her to be genuinely afraid of that hazard (and not merely to make untrue assertions about her anxiety), that fear should be discounted for CBA purposes. But why? The genuine fear of those who support regulation is no less a welfare-setback than the fear of those who (for ideological reasons) oppose it, or those who are indifferent.

# II. BUNDLED OR UNBUNDLED VALUATION: SHOULD RISK AND FEAR BE PRICED TOGETHER OR SEPARATELY?

In Part I, I presupposed that fear assessment and risk assessment would be separate analytic undertakings. For a given hazard, an agency engaged in CBA would predict and then monetize the premature deaths caused by the hazard. And it would, quite separately, predict and then monetize the fear/anxiety states caused by the hazard. The discussion in Part I addressed possible concerns about the feasibility and cost-effectiveness (given deliberation costs) of the predictive component of fear assessment. But the proponent of incorporating fear costs within CBA might object that this whole discussion was unnecessary. Fear and risk assessment can be bundled together, it might be proposed. Deaths can be sorted into different categories, which (inter alia) are differentially feared. Contingentvaluation or revealed-preference methods can be used to determine individual willingness-to-pay to avoid a risk of death of each type. This willingness-to-pay number should, in principle, incorporate individual willingness-to-pay to avoid the fear states associated with the anticipation of each type of death. Based upon the average willingness-to-pay to avoid a small risk of the different types of death, we can calculate a "value of statistical life" ("VOSL") for each type. For example, if individuals are (on average) willing to pay \$1,200 to avoid

<sup>95.</sup> For example, as already noted, fear and anxiety scales include observer- as well as subject-administered scales. See sources cited supra note 50.

#### CHICAGO-KENT LAW REVIEW

1004

[Vol 79:977

a 1 in 10,000 risk of incurring fatal cancer, but only \$800 to avoid a 1 in 10,000 risk of dying from a noncancerous disease, and \$600 to avoid a 1 in 10,000 risk of dying in a car crash, the VOSL for cancer would be \$12 million; for death from a noncancerous disease, \$8 million; and for a fatal car crash, \$6 million. These "tailored" VOSLs (tailored to different types of fatalities, including differentially feared fatalities) could then be employed by CBA analysts to price fatalities, obviating the need for a separate "fear assessment."

Why think that "tailored" VOSLs might incorporate a fear cost? To see the idea here in a concrete way, imagine a population of 10,000 exposed to two separate hazards, the first some old bridge that no one fears, the second a toxic dump that everyone fears. Each hazard will cause exactly one fatality in the population. Members of the population are polled about their willingness-to-pay to remove each hazard. If the individual is rational in the expected utility sense, then she conceptualizes each hazard as a lottery over possible outcomes,96 and determines willingness-to-pay by comparing this "Hazard Lottery" with the "No-Hazard Lottery" that results if the hazard is removed. In the case of the bridge, the Hazard Lottery differs from the No-Hazard Lottery by imposing a greater risk of premature death on the individual subject: outcomes in which the individual lives a full lifespan are relatively less likely (by 1 in 10,000), and outcomes in which she dies from disease or by accident are relatively more likely. In the case of the toxic dump, the Hazard Lottery differs from the No-Hazard Lottery in two ways: by imposing an incremental 1-in-10,000 risk of premature death on the subject and by involving a very high probability of fear states targeted at the dump, states that occur with zero probability in the No-Hazard Lottery and that (let us assume) are not replaced in the No-Hazard Lottery by fear states with other targets. Thus the members of the population exposed to the dump and bridge would, quite rationally, be willing to pay more to remedy the first: exposure to the dump means an incremental risk of death plus the certainty of incremental fear, while exposure to the bridge means only an incremental risk of death.

The idea of "tailored" VOSLs is not novel. In particular, the idea of using "tailored" VOSLs to capture the special fear/anxiety associated with certain kinds of deaths is not novel. Ricky Revesz, in a major article on the valuation of life in environmental law, argues that

96. See Adler, supra note 53, at 1257.

the EPA should employ a separate VOSL for cancer deaths, one that has been adjusted upwards from the VOSL revealed by wage-risk studies (in effect, VOSL for industrial accidents) to reflect the fact that cancer is especially "dreaded." An important distinction, here one that Revesz does not draw sufficiently clearly—is the distinction between fearing cancer and fear as a component of cancer morbidity.98 Someone exposed to a 1-in-10,000 risk of incurring fatal cancer is, in effect, handed a lottery ticket involving two kinds of fear states. First, there is fear of cancer, that is, the distress and arousal triggered by the substantial (perceived) risk that she might contract cancer-a fear state she incurs, let us imagine, with probability 1. Second, there is the fear of death that accompanies the pain, suffering, and other disease components of cancer: a fear state she incurs with probability 1 in 10,000. I am agnostic about whether agencies should employ cancerspecific VOSLs to capture the fear that is part and parcel of cancer itself. My main concern in this Article is with the widespread fear and anxiety states caused by the mere risk of death, illness, and injury, not with the less common (although surely not less intense) fear and anxiety states that are experienced as one symptom of disease or injury. This first kind of fear—fear apart from actual disease or injury should not be valued through "tailored" VOSLs. For this kind of fear. we do need a fear-assessment practice separate from risk assessment, or so I shall now argue.

### A. Welfare Equivalents and WTP/WTA: The Foundations of CBA

Should fear be valued separately from the risk of death, or should the two be ascribed a single, "bundled" cost? To answer this question (and related ones that will arise down the line) we need to

<sup>97.</sup> See Richard L. Revesz, Environmental Regulation, Cost-Benefit Analysis, and the Discounting of Human Lives, 99 COLUM. L. REV. 941, 972–73, 981–84 (1999). Revesz's suggestion was considered and rejected by the EPA's Science Advisory Board, for lack of sufficient evidence about the size of the fear premium. See EPA Science Advisory Board, An SAB Report on EPA's White Paper Valuing the Benefits of Fatal Cancer Risk Reduction 5–6 (July 27, 2000), at http://www.epa.gov/sab/pdf/eeacf013.pdf.

<sup>98.</sup> Revesz begins his discussion of "dread" by noting that cancer mortalities, unlike industrial accidents, "often occur following a long and agonizing ordeal." Revesz, *supra* note 97, at 972. This statement suggests that, by the "dread" component of cancer, Revesz means the fear that accompanies cancer itself. Yet Revesz goes on to say that an estimate of the value of a cancer death calculated by adding a morbidity premium to the value of an instantaneous death is "conservative" because "it does not account for the dread aspects of carcinogenic deaths." *Id.* at 973. "Dread," here, seems to mean the anticipatory fear of cancer that (rationally or irrationally) inflates willingness-to-pay to avoid a risk of cancer beyond the amount implied by its mortality *and* morbidity characteristics.

1006

discuss a very basic valuational problem within CBA: the difference between willingness-to-pay/accept and the novel valuational construct that I have elsewhere proposed and will rely upon in my analysis of fear assessment, namely the "welfare equivalent."

Consider a governmental official faced with a choice between various options. CBA aspires to measure the welfare effect of each option on a dollar scale—one that will reflect, at least roughly, the goodness of the option in light of overall welfare. How to do that? The measurement approach proposed in the economics literature is this: for each option, for each individual in the population, we can calculate her willingness-to-pay or -accept ("WTP/WTA") for that option, in dollars, relative to some baseline. Then the overall monetary number assigned to each option is the sum of the WTP/WTA amounts for that option, aggregated across the population.<sup>99</sup>

WTP/WTA is, crucially, understood in terms of the subject's preferences. In the idealized case, where uncertainty has been removed and the subject knows for sure which outcomes the regulatory options will lead to, the definition of WTP/WTA is straightforward. Imagine that the baseline of regulatory inaction leads to outcome W, and that a regulatory intervention leads to outcome W\*. Then person P's WTP/WTA for the intervention is the amount of money, subtracted from or added to his wealth in W\*, such that—with his wealth position in W\* thus changed—he is indifferent between W and W\*. He neither prefers W to amended W\*, nor amended W\* to W.<sup>100</sup> In the more realistic case where the subject is uncertain about the upshots of regulatory choice, so that each option is (in effect) a lottery over outcomes, the definition of WTP/WTA is more complicated but still essentially invokes preferences. Consider the set of all possible outcomes {W}. The baseline option is a lottery L that assigns one particular array of probabilities, summing to one, to these possible outcomes. The other regulatory choice L\* is a lottery that assigns a different array of probabilities, also summing to one, to these possible outcomes. Traditionally, economists define the subject's WTP/WTA for L\* as follows: the amount of money such that, subtracted from or added to his wealth position in each of the outcomes in L\*, he is indifferent between the L\* lottery (thus amended) and L.101 WTP/WTA

<sup>99.</sup> See Adler & Posner, supra note 42, at 177-87.

<sup>100.</sup> See ROBIN BOADWAY & NEIL BRUCE, WELFARE ECONOMICS 31-60, 195-234 (1984).

<sup>101.</sup> This amount is known as P's "option price" for the lottery L\*. Although P's WTP/WTA under uncertainty might be specified in other ways, I believe that the "option price" is the correct approach on my view of CBA as a decision-procedure implementing overall well-being,

under uncertainty is the wealth change such that, were it to occur in each and every possible outcome of a lottery being compared to a baseline lottery, the subject would neither prefer the lottery to the baseline lottery nor vice versa.

The sum of WTP/WTA, thus specified, functions as the analytic foundation for CBA within the contemporary economics literature. Applied economists recognize that agencies do not have boundless deliberational resources, and often propose CBA techniques that are simply approximations to the aggregate WTP/WTA construct<sup>102</sup>—for example, ignoring risk aversion, or pricing welfare impacts with an average WTP/WTA rather than one that is fully sensitive to the heterogeneity of individual preferences. But the sum-of-WTP/WTA is the concept that underlies these approximating techniques.

My own view of CBA is quite different. As I have argued elsewhere, the proper foundation for CBA is not WTP/WTA, but rather the construct of a welfare equivalent ("WE").103 CBA implements the normative criterion of overall well-being. But well-being and preferences do not necessarily match. The relevant account of welfare, where interpersonal comparisons come into play, is objectivist, not preferentialist.104 Given two outcomes, the baseline outcome W and another outcome W\*, P's (objective) welfare equivalent is this: the amount of money added to or subtracted from P's holdings in W\* such that W\* (thus amended) is objectively as good for P's welfare as W. Here is one example: if P is a sadist and W\* is an outcome differentiated from W by the fact that P inflicts pain on someone else, then P might have a large WTP for W\*, but his welfare equivalent is zero. Engaging in torture might satisfy P's preferences, but is not objectively better for his welfare. "Objective" welfare goods are those features of human lives that prompt convergence of idealized (not actual) preferences.<sup>105</sup> No one, under ideal conditions, would prefer sadism. Thus sadism is not objectively better for the sadist.

WEs, like the traditional notion of WTP/WTA, can be extended to the case of governmental choice under uncertainty. The "lottery"

and given the correct specification of overall-welfare maximization under uncertainty. This is not a topic I can pursue here. On CBA under uncertainty, see, e.g., FREEMAN, *supra* note 23, at 209–57; Richard C. Ready, *Environmental Valuation Under Uncertainty*, in HANDBOOK OF ENVIRONMENTAL ECONOMICS 568 (Daniel W. Bromley ed., 1995).

<sup>102.</sup> See, e.g., BOADWAY & BRUCE, supra note 100, at 211-20.

<sup>103.</sup> See Adler & Posner, supra note 42, at 220-22; Adler & Posner, supra note 43, at 272-80.

<sup>104.</sup> See Adler, supra note 42, at 289-302.

<sup>105.</sup> See id. at 298-99.

1008

notion remains useful. Where the choosing official and affected individuals are uncertain about the upshots of different governmental choices, each option can be understood as a lottery across outcomes. 106 The baseline option maps onto lottery L, say; a different option onto lottery L\*. Then P's welfare equivalent, as between the lotteries, is the amount of money added to or subtracted from each of the outcomes in L\*, such that L\* (thus amended) is objectively just as good for P as L. Convergent idealized observers would neither prefer L to L\*, nor vice versa.

The foundational construct for CBA, I suggest, is the sum of WEs, not the sum of WTP/WTA. For it is the sum of WEs (as weighted, perhaps, to compensate for the variable marginal utility of money), not the sum of WTP/WTA, that maps onto overall objective well-being. What does this mean, concretely, for agency practice? CBA analysts should, at least in some cases, override a subject's expressed or revealed WTP/WTA where the analyst believes that the WTP/WTA is "distorted" - where it substantially deviates from (what the analyst believes to be) the subject's welfare equivalent. To be sure, individuals are in many cases the best judges of their own welfare. Further, given the incremental deliberation costs of determining an individual's WE rather than his WTP/WTA, the apparent gap between the two welfare measures should be reasonably clear and substantial before the CBA analyst departs from the traditional WTP/WTA measure. Still, there will be ample scope within optimal administrative practice for such departures—for an agency to "second guess" an individual's judgment about the impact of an agency choice on his or her welfare, and specifically about the size of the monetary payment needed to counterbalance that impact.

Indeed, as Eric Posner and I have demonstrated in prior work, agencies undertaking CBA regularly correct for preference distortions and depart from the traditional WTP/WTA measure. 107 This can happen in three basic ways. Consider once more an agency choice between a baseline option, understood as a lottery L over possible outcomes, and another choice, understood as a different lottery L\* over outcomes. The subject's WTP/WTA for L\* might be distorted,

<sup>106.</sup> I am skeptical that the probabilities in this lottery are frequentist probabilities, and tend to think that they are subjective probabilities measuring the official's beliefs. But this is not an issue I can pursue here. See Adler, supra note 53, at 1276–79; Adler, supra note 1, at 1316–21; Matthew D. Adler, Legal Transitions: Some Welfarist Remarks, 13 J. CONTEMP. LEGAL ISSUES 5, 15–16 (2003).

<sup>107.</sup> Adler & Posner, supra note 43, at 280-89.

relative to his or her true welfare equivalent, by virtue of (1) distorted preferences with respect to the outcomes in the lotteries; (2) a distorted view of the lottery probabilities; or (3) a distorted mechanism for combining outcome-values and probabilities to arrive at an overall valuation of the lotteries. Agencies, in practice, correct for all three types of distortions to WTP/WTA. For example, agencies decline to count the satisfaction of sadistic preferences, racist, sexist, or homophobic preferences, preferences for drug use or other activities that are widely seen to be valueless, or (in most cases) disinterested preferences, as "benefits" for CBA purposes. These are all preferences for features of outcomes that, as a matter of objective welfare goods, make no difference to the subject's welfare.

Agencies also routinely correct for WTP/WTA amounts that are distorted by the subject's mistakes (by the agency's lights) about outcome probabilities.<sup>109</sup> A standard technique for doing so is to recharacterize the agency's choices in a way that circumvents the probability mistakes, and then to survey affected persons about their willingnessto-pay/accept for the recharacterized choices. For example, in a CBA regarding visibility over the Grand Canyon, the EPA showed respondents photographs of the site with different degrees of visibility. rather than merely telling them about concentrations of pollutants (obviating respondents' mistakes about the correlation between a given concentration and a given visibility).110 In a CBA regarding labeling of meat and poultry products, the USDA relied on contingentvaluation studies focused on the health benefits that (USDA predicted) would result from label changes, rather than contingentvaluation interviews about the literal changes in label wording being contemplated by the agency, since respondents might misunderstand the complicated linkages between label information, behavior, and health.111

<sup>108.</sup> See id. at 285-86, 281-82.

<sup>109.</sup> Much empirical work has documented that probability mistakes—specifically, probability ascriptions that fail to conform to the probability calculus—are widespread. See generally REID HASTIE & ROBYN M. DAWES, RATIONAL CHOICE IN AN UNCERTAIN WORLD: THE PSYCHOLOGY OF JUDGMENT AND DECISION MAKING (2001). Popular probability ascriptions that do conform to the calculus, but fail to match the decisionmaking official's probability ascriptions (whether these are taken as beliefs about the real, underlying frequentist probabilities that ought to drive the official's choices, or rather as the first-person subjective probabilities that ought to drive his choices, see supra note 106), also potentially count as "mistakes" that might warrant the official in correcting WTP/WTA amounts.

<sup>110.</sup> See Adler & Posner, supra note 43, at 283.

<sup>111.</sup> *Id*.

1010

More generally, the whole practice of risk assessment as an input to CBA is an elaborate effort to correct the mistaken probabilities that individuals who are exposed to hazards often ascribe to the possibility of death. Consider the arsenic rulemaking, where the EPA evaluated the benefit of reducing arsenic in drinking water from a baseline of fifty micrograms per liter, to twenty, ten, five, or three micrograms, by performing a risk assessment—predicting the deaths avoided by each regulatory option—and then monetizing those avoided deaths, rather than by directly polling individuals for WTP/WTA for reduced amounts of arsenic. 112 That sort of direct polling would have obviated the need for an arsenic risk assessment, but—given the wide divergence between lay and expert assessment of the changes in fatality probabilities created by a given reduction in toxins such as arsenic—would have produced distorted valuations of the regulatory options being considered by the EPA.

What about the third and final way in which WTP/WTAs can be distorted relative to welfare equivalents: by virtue of a distorted mechanism for combining outcome-values and probabilities to arrive at valuations of uncertain choices? To understand this distortion, we need a view about how outcome-values and probabilities are properly integrated. The answer should not be surprising, given the consequentialist roots of CBA and the criterion of overall welfare: outcomevalues and probabilities are properly combined in accordance with expected utility theory. 113 Given an agency baseline and some other choice, mapping onto lotteries L and L\*, subject P's welfare equivalent for L\* is the amount of money, added to or subtracted from P's wealth in every outcome in L\*, such that idealized observers, valuing the lotteries in conformity with the axioms of expected utility theory, would neither prefer the amended L\* to L, nor vice versa. There is considerable evidence, for example in the famous empirical work of Allais, and more recently of Tversky and Kahnemann,114 that laypersons deviate from the expected utility axioms. Agencies should

<sup>112.</sup> See Alan Randall & Warren Kriesel, Evaluating National Policy Proposals by Contingent Valuation, in Economic Valuation of Natural Resources: Issues, Theory, and Applications 153, 160 (Rebecca L. Johnson & Gary V. Johnson eds., 1990) (discussing the design of a contingent-valuation survey to elicit citizen valuations of national environmental policies, and positing that "citizens value programs in terms of delivered levels of services rather than, for example, concentrations of particular chemicals").

<sup>113.</sup> See Adler, supra note 53, at 1257 n.2 (citing sources explicating and defending an expected-utility account of rationality).

<sup>114.</sup> This empirical work is surveyed in HASTIE & DAWES, supra note 109.

2004 FEAR ASSESSMENT 1011

correct for this source of distortion to WTP/WTA, as well as for the others already discussed.

### B. Against Bundled Valuation

I have argued that the foundational construct for CBA is not WTP/WTA, but rather the welfare-equivalent ("WE"). Agencies should, and do in practice, correct individual valuations that rest on a clear misunderstanding about the features of outcomes that are intrinsically beneficial or harmful for welfare; about the empirical linkages between agency choices and good or bad outcomes; or about the correct way to value lotteries. This objectivist (and idiosyncratic!) view of CBA has important implications for the pricing of fear. To begin, it shows why proposals to measure fear and risk costs in a single bundle—both Revesz' proposal to use tailored VOSLs and other bundled-valuation proposals—are generally problematic.

I will use the following stylized facts to illustrate my points. Some feared carcinogen currently exists in some medium (food, water, air, ground, etc.) at some baseline concentration. One million persons (consumers, workers, citizens, etc.) are exposed to the toxin. An agency is considering three regulatory options: inaction; the "moderate" option of issuing directives or taking other steps to reduce the toxin to a lower level; and the "strict" option of issuing directives or taking other steps to eliminate the toxin entirely. The moderate option prevents ten cancer deaths, relative to baseline. The strict option prevents ten more, for a total of twenty, relative to baseline. The monetized benefit of the moderate option is the sum of welfare equivalents (WEs) for the move from baseline to a lower level of the toxin, across the population. Similarly, the monetized benefit of the strict option is the sum of WEs for the move from baseline to a zero level of the toxin. For simplicity, assume that individuals are homogenous in their tastes, wealth levels, etc. so that for each individual in the population the three regulatory options map onto the same lotteries: a baseline lottery L; a lottery L\*, corresponding to the moderate option, which differs from baseline in that the actual risk115 of cancer

<sup>115.</sup> The "actual" change in an individual's cancer risk produced by a regulatory option might mean the change in the frequentist probability of the individual's getting cancer, or it might instead mean the change in the subjective probability number that the agency official making the choice ascribes to the possibility of the individual's getting cancer. This is a thorny issue, which I have bracketed, see *supra* note 106. In the stylized case discussed in the text, I am assuming that the actual change in risk equals the number of avoided deaths divided by the size of the population exposed to the toxin: 10 divided by 1 million for the moderate option, 20

1012

is reduced by 1 in 100,000 and the individual will (or may) suffer fewer days during which he fears cancer; and a lottery  $L^{**}$ , corresponding to the strict option, which differs from baseline in that the actual risk of cancer is reduced by 2 in 100,000 and the individual will (or may) suffer fewer days in which he fears cancer.

What are the possible techniques for estimating the sum of WEs that might obviate the need for a separate fear assessment? Because of the simplifying assumption that individuals are homogenous, and face the same lotteries L, L\*, and L\*\*, estimating the sum of WEs in this case reduces to estimating the unique WE amounts for L\* and L\*\* relative to baseline L, and multiplying that amount by the population size.

First, contingent-valuation surveys focused on the literal legal language of the regulatory options being considered by the agency, or the changes in toxin level resulting from those options, might be undertaken.<sup>116</sup> Assume that the moderate and strict options are formulated as technology-based requirements. Then individuals might be asked for their willingness-to-pay for those technological prescriptions, or for a lower or zero concentration of the toxin. If individuals were excellent judges of the causal links between technology or chemical concentrations and cancer deaths, so that their subjective estimates of the deaths avoided by the regulatory options closely tracked the actual numbers, and if other conditions held true, then WTP numbers expressed in the sort of contingent-valuation survey just described would be good evidence of individuals' welfare equivalents for the regulatory interventions, and would subsume both the risk-reduction and fear-reduction benefits of those interventions. Not only would fear assessment be unnecessary, but so too would risk assessment. The problem, of course, is that perceived risk and actual

divided by 1 million for the strict option. If frequentist fatality probabilities are calculated in a commonsensical way—such that the probability of P's dying from a toxin equals the frequency with which all persons exposed to the toxin die as a result—and if the agency official develops subjective probabilities that track the frequentist probabilities thus calculated, then the number of avoided deaths divided by the population size will equal the "actual" change in risk on either understanding of "actual" risk. To be sure, frequentist probabilities could be calculated in a different way, and the agency official's subjective probabilities need not track the frequentist probabilities. But all the points I make in the analysis below, criticizing various "bundled" valuation techniques, would hold true even where the change in "actual" cancer risk for some individual resulting from some regulatory option does not equal the avoided deaths divided by the exposed population.

116. For a discussion of the contingent-valuation technique, see infra Part III.

risk<sup>117</sup> can differ, and often do. By "perceived risk" I mean the risk of death as perceived by those exposed to the hazard. In the case at hand, risk assessment leads the agency to predict that the moderate option avoids ten deaths in an exposed population of one million and the strict option ten more, and thus to ascribe an actual risk-reduction of 1 in 100,000 to L\* and an actual risk-reduction of 2 in 100,000 to L\*\*. But individuals exposed to the carcinogenic toxin might well believe that the moderate and strict options involve much greater risk reductions: 1 in 1,000 and 5 in 1,000, for the sake of argument. Thus individual WTP amounts voiced in contingent-valuation studies focused on the literal legal language being considered by the agency, or on the chemical concentration amounts that would result were that language to be adopted, might diverge wildly from the individuals' true WEs for the agency's choices and from the agency's estimates of the individuals' true WEs. In our stylized case, the WE for the moderate option is the welfare equivalent for a 1 in 100,000 riskreduction, plus some additional amount for fear-reduction. If the moderate option is perceived by affected individuals as involving instead a 1 in 1,000 risk-reduction, then stated WTP for that option (described literally or in chemical terms) would presumably be orders of magnitude larger than the WE. Ditto for the strict option.

"Tailored" VOSLs, as proposed by Revesz, constitute a second way that agencies might produce a bundled estimate of regulatory benefits, including fear-reduction benefits, without engaging in fear assessment. VOSLs are widely used in contemporary CBA practice to value life saving.<sup>118</sup> Each death avoided is multiplied by a sum in the vicinity of \$6 million. The underlying theory is that, where small risks are involved, WTP to avoid a risk is approximately a linear function of the risk avoided. If WTP to avoid a 1-in-1 million risk is \$6, a

<sup>117.</sup> An individual's perceived risk of some hazard is her own subjective probability of that hazard. That can differ from the actual risk, whether defined as the frequentist probability or instead as the agency official's subjective probability. See supra note 106. For evidence of the divergence between actual and perceived risk in the area of environmental, health, and safety regulation, see, e.g., Ted Gayer et al., Private Values of Risk Tradeoffs at Superfund Sites: Housing Market Evidence on Learning about Risk, 82 REV. ECON. & STAT. 439 (2000) (finding that individuals' perceived probability of cancer from Superfund sites, and therewith their WTP/WTA to avoid these sites, is changed by EPA's release of information from its remedial investigation of the sites); Mary Riddel et al., Environmental Risk and Uncertainty: Insights from Yucca Mountain, 43 J. REGIONAL SCI. 435 (2003) (finding that the perceived risk of an accident during the transportation of high-level radioactive waste, among residents of Southern Nevada, is generally much higher than the Department of Energy's risk estimate). See generally HASTIE & DAWES, supra note 109 (discussing lay probability mistakes).

<sup>118.</sup> The literature on VOSLs is large. See Adler, supra note 1, at 1398 n.297 (citing sources).

1014

1-in-100,000 risk is \$60, and a 1-in-10,000 risk is \$600, then the sum of WTP for a measure that avoids, and is seen to avoid, a single death is \$6 million regardless of the size of the population at risk—assuming it is large. CBA, as I have conceptualized it, involves welfare equivalents rather than WTP, but the theory of VOSLs plausibly carries over to welfare equivalents. Indeed the approximate linearity of welfare equivalents as a function of risk-reduction (for small risks) is an upshot of expected utility theory—the normative account of choice that, I have suggested, helps define the concept of a welfare equivalent. Imagine that individuals, after thorough deliberation and with a good understanding of probability theory, on average state that they are willing to pay an incremental six dollars for each incremental 1-in-1 million reduction in fatality risk. Then the sum of WEs associated with the risk-reduction component of regulatory options—in our stylized case, the options of reducing the toxin or eliminating it entirely can reasonably be estimated by predicting the deaths avoided by those options and multiplying that number by \$6 million.

Although straight VOSLs are a plausible way to capture the risk-reduction benefits of regulatory choices, "tailored" VOSLs are *not* a plausible way to capture the combined risk- and fear-reduction benefits of regulatory choices. Consider our stylized case. Revesz's proposal is that there exists a "tailored" VOSL for cancer death—a number Y greater than \$6 million—such that 10Y will reliably track the sum of WEs for the moderate option and 20Y will reliably track the sum of WEs for the strict option. But this proposal rests on two premises, both deeply problematic. The first premise is that fear is a linear function of perceived risk; the second, that perceived risk and actual risk are the same. Much recent work in psychology undermines the first premise. As Loewenstein and co-authors explain, in a review article summarizing this work:

Changes in probability within some broad midrange of values have little effect on anticipatory emotions perhaps because . . . emotions arise in large part as a reaction to mental images of a decision's outcomes. Because such images are discrete and are not much affected by probabilities, the emotions that arise from them are

119. As usual, Schelling was prescient:

A special difficulty of evaluating the anxiety and the [feared] event together is that they probably do not occur in fixed proportions.... To be specific, there are good reasons for considering the worth of risk-reduction to be proportionate to the absolute reduction of risk, for considering a reduction from 10 percent to 9 percent about equivalent to a reduction from 5 percent to 4 percent. There is no reason for the anxiety to follow any such rational rule.

Schelling, supra note 33, at 151.

likewise insensitive to variations in probability. One's mental image of what it would be like to win the state lottery, for example, is likely to be about the same, whether there is a 1 in 10,000,000 chance of winning or a 1 in 10,000 chance of winning.... This is not to say that fear responses are completely unaffected by probabilities, but they are largely unaffected by orders-of-magnitude differences at the extreme (e.g., between a 1 in 100,000,000 chance of winning the lottery and a 1 in 100,000 chance). 120

In short, "feelings of fear or worry in the face of decisions under risk or uncertainty have an all-or-none characteristic; they may be sensitive to the possibility rather than the probability of negative consequences."121 In particular, the intensity of an individual's distress about a toxin might be largely a function of the knowledge that she is exposed to the toxin, and not solely a function (let alone a linear function) of her perceived probability that the toxin will cause her death. The agency's strict option, which eliminates the toxin entirely, might well produce a fear-reduction benefit (fear-days avoided) many times the fear-reduction benefit produced by the moderate option-even though the death-reduction benefit (twenty deaths) is just twice the death-reduction benefit of the moderate option (ten deaths). If so, the sum-of-WEs for the strict option should be more than double the sum-of-WEs for the moderate option—perhaps quite substantially so. But whatever the particular number Y that might be used as the "tailored" VOSL for cancer hazards, the methodology will necessarily estimate the monetized benefit of the strict option (20Y) to be exactly double the monetized benefit of the moderate option (10Y). More generally, "tailored" VOSLs assume that the ratio of the fear-days avoided by different regulatory options exactly equals the ratio of the deaths avoided by those options—and that is a highly problematic assumption, given the psychology literature just cited.

Even if fear *is* a linear function of perceived risk, the "tailored" VOSL approach runs afoul of the possible divergence between actual and perceived risk.<sup>122</sup> To see this, imagine that in our stylized case the perceived risk-reduction generated by the moderate option is 1 in 1,000 (rather than 1 in 100,000), and the perceived risk-reduction generated by the strict option is 5 in 1,000 (rather than 2 in 100,000). On

<sup>120.</sup> George Loewenstein et al., Risk as Feelings, 127 PSYCHOL. BULL. 267, 276 (2001) (citations omitted).

<sup>121</sup> Id

<sup>122.</sup> See Markowitz & Gutterman, supra note 62, at 102 (finding perceived threat to physical health to be significant in predicting demoralization); Zeidner & Shechter, supra note 41, at 199–200 (finding that perceived air pollution better correlates with anxiety and anger about air pollution than actual air pollution).

1016

On the (implausible!) assumption that experienced fear-days correlate linearly with perceived risk, the amounts that well-reasoning individuals express in interviews inquiring about willingness-to-pay to avoid small cancer risks should be approximately a linear function of those risks. For example, individuals might express a willingness to pay \$12 to avoid a 1-in-1 million cancer risk, \$120 to avoid a 1-in-100,000 cancer risk, and so on, generating a "tailored" VOSL for cancer of \$12 million. But \$120 would then be the individual welfare equivalent for the combined risk- and fear-reduction benefit of an option that (1) reduces the individual's actual risk of death by 1 in 100,000; and (2) reduces the individual's perceived risk of death by 1 in 100,000, and therewith his fear-days by some amount equaling a constant K multiplied by 1 in 100,0000. \$120 would not be the individual welfare equivalent for the moderate option in our stylized case, namely an option that (1) reduces the individual's actual risk of death by 1 in 100,000 and (2) reduces the individual's perceived risk of death by 1 in 1,000, and therewith his fear-days by an amount equaling constant K multiplied by that reduction in perceived risk. Rather, his welfare equivalent for the moderate option would be larger than \$120-since the fear-days avoided by the moderate option are the constant K multiplied by 1 in 1,000 (the perceived risk-reduction) rather than 1 in 100,000 (the actual risk-reduction). Nor, finally, can it be assumed that the ratio between actual and perceived risk is approximately constant across regulatory choice situations, with this assumption somehow used to salvage the "tailored" VOSL method. Consider the stylized case. The strict option achieves a reduction in actual risk of 2 in 100,000, the moderate option a reduction in actual risk of 1 in 100,000. What is to prevent the perceived reductions in risk from having a ratio other than 2 to 1: for example, 5 to 1, as I have posited?

Yet a third "bundled" valuation idea, different from the notion of asking individuals directly about regulatory proposals, or using "tailored" VOSLS, is this: for each regulatory option, conduct a contingent-valuation interview where respondents are told about the fear-relevant features of the option, plus the actual risk-reduction achieved by the option, and WTP/WTA is elicited for the option thus described. In the stylized case, that would mean estimating WE for the moderate option by asking about willingness-to-pay for the reduced concentration of the toxin achieved by the moderate option, and informing respondents that the risk-reduction resulting from the lower concentration is 1 in 100,000. Similarly, WE for the strict option

would be estimated by asking about willingness-to-pay for eliminating the toxin, and informing respondents that the risk reduction resulting from elimination is 2 in 100,000. The idea here is that the risk-reduction component of stated willingness-to-pay should track the actual risk, not the perceived risk (thus the effort to inform respondents about the actual risk), and that the fear-reduction component should reflect whatever respondents are scared of, not necessarily the perceived risk (thus the description of the fear-relevant features of regulatory options and the separate interview for each option, with no constraint that the ratio of the fear-reduction benefits of different options should be equal to the ratio of their death-reduction benefits).

Although this "third" bundled approach is an improvement on the first two, it is still problematic. The largest problem is this: there is substantial evidence that fear and anxiety skew decisionmaking under uncertainty-specifically, that individuals in a fearful or anxious state are much less sensitive to probabilities than expected utility axioms would require them to be, even more so than ordinary decisionmakers in a calm state.<sup>123</sup> For example, Rottenstreich and Hsee compared the differential WTPs to avoid small (1 percent) and large (99 percent) probabilities of a feared outcome (an electric shock), to the differential WTPs to avoid the very same probabilities of an averse but pallid outcome (losing some money).124 They found that a 99-fold change in probability produced only a 1.5 fold change in WTP for the feared outcome, and an 18-fold change in WTP for the pallid outcome. Specifically, subjects were willing to pay seven dollars to avoid a 1 percent chance of being shocked, and ten dollars to avoid a 99 percent chance of being shocked! Similarly, Sunstein found that differential WTP to avoid a 1-in-1 million versus 1-in-100,000 risk of death described in a gruesome manner (so as to make the subjects anxious) was substantially smaller than differential WTP to avoid the same risk of death described less graphically. 125 These experiments demonstrate what Sunstein calls "probability neglect": choices by emotional decisionmakers are driven by their emotions, not the probabilities. For CBA purposes, this means the following: WTP/WTA amounts for lotteries expressed by anxious or fearful individuals are

<sup>123.</sup> See generally Loewenstein et al., supra note 120; Cass R. Sunstein, Probability Neglect: Emotions, Worst Cases, and Law, 112 YALE L.J. 61 (2002).

<sup>124.</sup> Yuval Rottenstreich & Christopher K. Hsee, Money, Kisses, and Electric Shocks: On the Affective Psychology of Risk, 12 PSYCH. SCI. 185 (2001).

<sup>125.</sup> See Sunstein, supra note 123, at 77-78.

1018

likely to deviate dramatically from their true welfare equivalents, given the dramatic departures from expected utility maximization caused by fear and anxiety.

The problem of "probability neglect" connects to a very deep point about the proper role of fear in cost-benefit analysis. Fear is a welfare-reducing feature of outcomes, one that should count as a cost along with other, negative features such as death, pain, or bodily harm. If a regulatory choice reduces the fear that certain individuals would otherwise experience, then (ceteris paribus) the welfare equivalents of those individuals for that choice is positive. But to say that fear is a bad feature of outcomes is not to say that estimates of welfare equivalents for regulatory choices, and for the lotteries over outcomes produced by regulatory choices, should be derived from the expressed or revealed preferences of fearful evaluators. Rather, the relevant expressed or revealed preferences are those of individuals likeliest to be sensitive to the balance of objective welfare goods individuals likeliest to generate WTP/WTA amounts that are close to the true welfare equivalents. Where risk-reduction is involved, this means (inter alia) that the individuals should be processing the risks in accordance with expected utility theory, at least roughly. And the literature on "probability neglect" suggests that fearful individuals do not do that.

"Probability neglect" thus undermines the third "bundled" valuation technique I am now considering, and more generally suggests that CBA estimates of the value of risk-reduction should be based on the expressed or revealed preferences of calm, not fearful individuals. Mentioning the fear-relevant features of regulatory choices to interview respondents (in our stylized case, the fact that the baseline and moderate options involve some exposure to a dreaded toxin, and that the strict option reduces exposure to zero) might well have the effect of scaring those respondents, and thus skewing their willingness-to-pay for the risk-reduction component of various options.

Probability neglect is not the only difficulty, here. Let me briefly mention some additional limitations of this third technique: (1) "Stigma" and distorted outcome-preferences. Some diseases, such as cancer, may be stigmatized, in the sense that individuals disprefer having the disease to having a nonstigmatized disease identical in its

mortality and morbidity characteristics. 126 An individual with this intrinsic preference against the stigmatized disease would express a higher willingness-to-pay to avoid a given risk of the disease, as against the same risk of a nonstigmatized disease that is equally fatal, painful, distressing, and disruptive of work and social interaction, even if the individual conforms to expected utility theory, and even bracketing the reduction of anticipatory fear. This is a distortion. since the objective welfare impact of a disease for some diseased person reduces to its physical, psychic, emotional, occupational, and affiliational impacts on her; the fact that the disease falls in some especially stigmatized category does not make it more harmful, except insofar as individuals with stigmatized diseases are, say, more isolated, or upset. The third "bundled" technique cannot avoid the "stigma" distortion: where a regulatory intervention reduces the risk of a stigmatized disease, telling interview respondents the name of the disease ("cancer," in our stylized case) would trigger the distortion. while failing to tell them would underestimate the fear-reduction benefit (since stigmatized diseases, plausibly, produce more anticipatory fear than non-stigmatized diseases). (2) Fear and perceived risk. Fear is not just a function of perceived risk, but perceived risk may not be completely irrelevant.<sup>127</sup> Assume it is not. If so, and if perceived and actual risk diverge, a contingent-valuation format where respondents are asked for their WTP for the actual risk-reduction secured by regulatory intervention with respect to some hazard, which is described to them in light of its fear-relevant characteristics (other than the perceived risk), produces a skewed estimate of the welfare equivalent for intervention. In our stylized case, the WE for the moderate option would be estimated by asking respondents to value a 1-in-100,000 reduction in risk resulting from a lower toxin level; and the WE for the strict option would be estimated by asking respondents to value a 2-in-100,000 reduction in risk resulting from the elimination of the toxin. But individuals in the population

<sup>126.</sup> Berman and Wandersman, in their review of the empirical scholarship on cancer fear, find that "[c]ancer is feared in the general population more than other scrious medical conditions" and suggest (as I read the review) that this difference is partly but not wholly grounded in the objective differences between cancer and these other conditions. Steven H. Berman & Abraham Wandersman, Fear of Cancer and Knowledge of Cancer: A Review and Proposed Relevance to Hazardous Waste Sites, 31 Soc. Sci. Med. 81, 87 (1990).

<sup>127.</sup> See Locwenstein et al., supra note 120, at 276, 277 (declining to assert that "fear responses are completely unaffected by probabilities" and suggesting that "[t]he probability weighting function is flatter... for vivid outcomes that evoke emotions than for pallid outcomes").

1020

generally perceive the moderate option to involve a much larger reduction in risk (1 in 1,000), and ditto for the strict option (5 in 1,000). Thus, responses to the interview questions just described would underestimate the WEs of the options. Ceteris paribus, a given reduction in the chemical concentration of some toxin, when perceived as involving a 1-in-1,000 risk-reduction, will (or at least may) produce a larger number of avoided fear-days then the same reduction in chemical concentration perceived to involve a 1-in-100,000 reduction in fatality risk. (3) Predicting fear. There is much evidence to suggest that individuals are not always accurate in predicting their future emotional states, including fear and anxiety states.<sup>128</sup> This is a further source of deviation between an individual's stated willingness-to-pay to remove some feared hazard, and her welfare equivalent for removal. Imagine a favorable case for the "bundled" valuation of fear and risk. Individuals are not afflicted by "probability neglect"; the actual and perceived risk-reductions of removing some hazard are the same: the deaths that would result from the hazard are not "stigmatized." An exposed individual is asked to value regulatory intervention. Deciding in conformity with expected utility theory, she conceptualizes the intervention as a lottery J\* differing from baseline lottery J in that her probability of premature death is lower, and N fewer fear-days occur. If in fact the reduction in fear-days is M not N, then her valuation will deviate from her true welfare equivalent for J\*.

To sum up: "Probability neglect," the deviation between actual and perceived risk, and the absence of any simple connection between perceived risk (let alone actual risk) and fear, as well as other problems, undermine the three "bundled valuation" techniques I have considered. The simplest solution is to monetize fear and risk separately. Consider the stylized case, and the problem of valuing the moderate option. That option maps onto a lottery L\* which, as a matter of objective welfare goods, differs from L in two ways: by changing the subject's risk of a disease with certain morbidity and fatality characteristics and by changing his fear states. Imagine, then, a lottery L+ that involves the very same change in the subject's actual mortality and morbidity risk as L\* (in this example, 1 in 100,000) but no change in his fear states, and a lottery L++ that involves the very

<sup>128.</sup> See George Loewenstein & David Schkade, Wouldn't It Be Nice? Predicting Future Feelings, in WELL-BEING: THE FOUNDATIONS OF HEDONIC PSYCHOLOGY 85 (Daniel Kahneman et al. eds., 1999).

same change in the subject's perceived risk and concomitant fear states as  $L^*$ , but no change in his actual mortality and morbidity risk. My suggestion is that we estimate the welfare equivalent for  $L^*$  by summing the welfare equivalents for  $L^+$  and  $L^++$ .

Less formally: we use market or contingent-valuation data to estimate welfare equivalents for the actual, 1-in-100,000 reduction in the risk of a disease with the morbidity and mortality characteristics of cancer (but with the welfare-irrelevant "stigma" of cancer eliminated, as far as possible, from the valuation). Welfare equivalents for riskreductions should be roughly a linear function of the reduced risk. where small risks are involved, and so the cumulative risk-reduction benefit can be estimated as the number of deaths avoided (ten in this case) multiplied by a VOSL number. Separately, we predict the change in fear states that the subject will experience as result of the lower toxin level, via his lower perceived risk of cancer and other determinants of fear, and use contingent-valuation techniques (as elaborated below) to determine his welfare equivalent for that reduction in fear taken alone. The latter step is just what I have called "fear assessment." The output of this fear assessment—a monetary valuation of the change in the subject's fear states flowing from the mitigation of the hazard—can be added to the monetized value of the change in his risk of disease and death flowing from the mitigation of that hazard to approximate his all-in monetary valuation of the mitigation.

To be sure, there is an additivity assumption here that is not warranted under all conditions. The monetary equivalent for the welfare impact of fear plus risk is not necessarily equal to, or even well approximated by, the monetary equivalent for the welfare impact of fear plus the monetary equivalent for the welfare impact of risk. Providing a rigorous analysis of the additivity issue is beyond the scope of this Article. Intuitively, one might say this: where the anticipatory fear of a fatal disease or injury, and the fatal disease or injury itself, make roughly independent contributions to a subject's welfare, and where the fear of the disease does not substantially change the welfare productivity ("marginal utility") of money, the additive technique just described will provide a good approximation to the subject's true welfare equivalent. These conditions are quite plausible, at least where

<sup>129.</sup> It seems intuitively clear that, where fear and longevity do not make independent contributions to the subject's welfare, additivity can break down. Here is an extreme example. P can live a long life or a shorter life. His lives can be more or less anxious. Once a certain high level of anxiety is reached, longer life is no better than shorter life. In the baseline lottery L, P for certain will live a long life and a calm life. In the comparison lottery L\*, P is at some risk r of

1022

the fear states produced by some hazard do not result in widespread changes to a subject's activities and relationships (which would tend to produce a substantial change in the marginal utility of money).

Where the additivity conditions do break down, the best alternative to the "unbundled" valuation of fear and risk is, I suggest, a fourth kind of "bundled" technique: one where the agency predicts both the actual risk-reduction and the fear-days avoided by some regulatory intervention, and uses a contingent-valuation interview to determine willingness-to-pay for a lottery differing from baseline by those combined changes. In our stylized case, assume that the agency makes the following predictions about the moderate and strict op-

living a shorter life, and all his possible lives are extremely anxious, so much so that the longer possible lives in L\* are no better than the shorter possible lives. Consider, now, L+, a lottery which has the same risk characteristics as L\* but not the fear characteristics. In L+, P has a probability r of living a shorter calm life, and a probability 1-r of living a longer calm life. And consider L++, a lottery that has the same fear characteristics as L\* but not the risk characteristics: in L++, P for certain lives a long, extremely anxious life. In this case (assuming money has the same utility in all the worlds), it is clear that P's welfare equivalent for L\* is not the sum of his welfare equivalents for L+ and L++. Rather, his welfare equivalent for L\* just equals his welfare equivalent for L++. Once we have injected sufficient anxiety into P's lives to make the longer lives no better than the shorter ones (L++), adding a risk of shorter life (L\*) makes no difference to the expected utility of the lottery over lives.

Similarly, it seems intuitively clear that, where fear changes the marginal utility of money, additivity can break down. Assume P is now forty. In L, he lives to seventy for sure. In L\*, he has a risk r of dying at the age of sixty, 1-r of dying at age seventy, and he experiences terrible anxiety in the immediate future, which abates once he's forty-one. This anxiety radically deflates the utility of money for P. In L+, P has a risk r of dying at age sixty, and no anxiety. In L++, he experiences terrible anxiety in the immediate future and no incremental risk. Here, it seems, P's welfare equivalent for L\* (in the "willingness to ask" sense, i.e., the amount we'd have to pay P in L\* in the immediate future to make him just as well off as in L) exceeds the sum of his welfare equivalents for L+ and L++, again in the willingness-to-ask sense—at least if there's no possibility of investing the money. To compensate P for L\*, we need to compensate him both for the welfare loss of the terrible anxiety, and for the expected welfare loss associated with the incremental risk of premature death. But the latter compensation would have to be effected at the money/welfare tradeoff rate of L\*, where P is terribly anxious and therefore a given welfare increment requires more dollars than in L+.

As for the flip case, where fear and longevity do make independent contributions, and fear does not substantially affect the welfare productivity of money: Imagine (as is standardly assumed in the QALY literature) that an individual's lifetime welfare can be represented as a sum of well-being in each year, i.e., there is intertemporal independence. Thus a case in which the hazard creates an incremental risk of fatal injury or disease in later years (e.g., a cancer that will result, if at all, years down the line), and a fear that's experienced in earlier years, is one in which fear and risk make independent contributions to welfare. Assume, now, that the fear is not so intense as to change the welfare productivity of money. Then additivity would seem to obtain. Concretely, in lottery L, P lives to seventy for sure. In L\* he has a risk r of dying at age sixty, and he experiences moderate anxiety for a year about that prospect; this anxiety is a hedonic loss, but it doesn't change the welfare/money tradeoff. In L+, P has a risk r of dying at sixty but no anxiety; in L++ he has moderate anxiety but no risk. Then (1) the difference between L\* and L, in utility terms, does equal the sum of the utility difference between L+ and L and the utility difference between L++ and L; and (2) the amount of money it takes, in L+, L++, and L\* to compensate for a given utility difference is the same.

tions: the moderate option will avoid ten deaths and one million fear-days (one for each individual in the population), while the strict option will avoid twenty deaths and twenty-five million fear-days (twenty-five for each individual). Then L\* is a lottery differing from baseline by a reduced fatality risk of 1 in 100,000 and one fewer fear-day, while L\*\* is a lottery differing from baseline by a reduced fatality risk of 2 in 100,000 and twenty-five fewer fear-days. Contingent-valuation interviews would then be conducted inquiring about willingness-to-pay for the two lotteries thus described. Note that this technique *does* require agencies to quantify fear, and in that sense to engage in fear assessment, but it values fear- and risk-reductions together, not separately.

The difficulties with this fourth and final "bundled" technique are various. First, it would impose greater cognitive demands on interview subjects than asking them separately about willingness-topay to avoid risk and willingness-to-pay to avoid fear. Second, it would inhibit standardization, thereby increasing deliberation costs and making CBA more vulnerable to inexpert or politicized agencies. 130 "Unbundled" fear assessment would allow agencies to develop a standard cost per fear-day, paralleling the standard cost per death beginning to emerge in current regulatory practice;131 quantifying fear- and death-reduction might be difficult, but monetizing this reduction would be straightforward. By contrast, the "bundled" technique now being considered would presumably require agencies to conduct separate contingent-valuation interviews for each of its options, unless a standardized valuation function for combinations of fear- and risk-reduction could somehow be developed. Third, and perhaps most importantly, the technique is inconsistent with the VOSL method now widely used by agencies to value risk-reductions. Risks would instead be valued directly, in combination with fear, rather than indirectly by multiplying deaths by a money price. The final "bundled" technique would therefore constitute a fairly radical change in current CBA practices. Perhaps, on balance, this change is warranted. Again, the additivity conditions undergirding "unbundled" fear assessment may break down and, where they do, radical change might be a good thing.

<sup>130.</sup> On the importance of agency expertise and fidelity in choosing among variants of CBA, see Adler & Posner, *supra* note 42, at 217–18.

<sup>131.</sup> See supra note 69.

1024

Or perhaps not. Comparing the fourth and final "bundled" technique to "unbundled" fear assessment is a truly difficult enterprise, beyond the scope of this Article. What I have established, I hope, is that the best way to incorporate fear costs within CBA, consistent with current, VOSL-based practices for monetizing risk-reduction, is "unbundled" fear assessment. The only variant of "bundling" consistent with VOSLs is Revesz's proposal to use "tailored" VOSLs. And that kind of "bundling" is deeply problematic. It is hard to see how that approach, rather than "unbundled" fear assessment, could be the incremental change to current CBA practice that we would be justified in making. For the remainder of the Article, I will focus on "unbundled" fear assessment and consider how agencies, within that context, should develop a price for fear states.

## III. PRICING FEAR STATES: REVEALED PREFERENCE OR CONTINGENT VALUATION?

Assume I am correct that agencies should engage in "unbundled" fear assessment, at least under certain conditions. Agencies should predict, and separately value, the change in fear states resulting from the mitigation or elimination of feared hazards. How, then, should these fear states be monetized? To begin, should fear assessment draw its values from revealed-preference or rather contingent-valuation studies?

Revealed-preference and contingent-valuation studies are the two standard sources of WTP/WTA values employed by CBA. 132 Revealed-preference studies use behavior to infer a valuation. Most straightforwardly, the price of a marketed good evidences the WTP of the marginal consumer. Various revealed-preference methods also exist for valuing goods that are not the direct subject of market transactions. For example, WTPs for environmental amenities can be inferred from "travel cost" data (park users are willing to incur greater direct travel costs and foregone wages to visit parks they prefer more), 133 or from the variation of housing prices near amenities. 134 WTP/WTA for the risk of death can be inferred from the wage differential between more and less dangerous occupations. 135 As for "contingent valuation" studies, these are based on interviews or mail

<sup>132.</sup> See FREEMAN, supra note 23, at 95-136, 161-87.

<sup>133.</sup> See id. at 419-33.

<sup>134.</sup> See id. at 353-97.

<sup>135.</sup> See id. at 297-321; VISCUSI, supra note 87, at 34-75.

surveys, where respondents are asked to express their preferences as between goods, or lotteries of goods, and money.<sup>136</sup> Most simply, average WTP for a good might be elicited by asking respondents "What is the maximum you are willing to pay?" for the good, and averaging the responses. A variety of other, more sophisticated survey techniques have been developed over the forty-some years since the inception of contingent-valuation work. A widely followed approach today is to employ so-called "single-bounded, dichotomous-choice" questions. Each respondent is asked "Would you be willing to pay \$X?" for the good, where the queried amount is varied among respondents; econometric techniques are then applied to the survey answers to infer an average WTP.<sup>137</sup>

Although the correct CBA construct is the welfare equivalent, not WTP/WTA, revealed-preference and contingent-valuation studies would also be the main data source for welfare equivalents. In particular, as I have already suggested, welfare equivalents can often be derived from revealed-preference or contingent-valuation studies evidencing WTP/WTA with respect to a recharacterized set of agency choices.

I have no quarrel with revealed-preference methods in other contexts. But they are, I think, a problematic tool for valuing fear states, and thus a problematic tool for regulators engaging in "unbundled" fear assessment as I have described it. 138 Let us simplify matters by ignoring the possibility of uncertainty with respect to fear states themselves, and ask how we should determine P's welfare equivalent

<sup>136.</sup> For overviews of the contingent-valuation method and the literature about it, see generally Ian J. Bateman et. al., Economic Valuation with Stated Preference Techniques: A Manual (2002); Freeman, supra note 23, at 161–87; Robert Cameron Mitchell & Richard T. Carson, Using Surveys to Value Public Goods: The Contingent Valuation Method (1989); Valuing Environmental Preferences: Theory and Practice of the Contingent Valuation Method in the US, EU, and Developing Countries (Ian J. Bateman & Kenneth G. Willis eds., 1999).

<sup>137.</sup> See BATEMAN ET AL., supra note 136, at 138–42 (discussing different methods for eliciting monetary values in contingent-valuation surveys). As the authors explain, the single-bounded dichotomous choice technique is itself now being refined to eliminate possible characteristic biases (perhaps a nay-saying bias) and to elicit more information from respondents. See id. at 141 (discussing one-and-a-half bound and double-bounded dichotomous choice formats).

<sup>138.</sup> Whether revealed-preference techniques would be useful for agencies employing the fourth "bundled" valuation methodology I described above, in Part II.B, is a different question. Even within the context of that methodology, contingent valuation would seem to be the more natural technique, since an individual's revealed WTP to avoid some feared hazard might well diverge from his or her WE for the bundle of fear- and risk-reduction by virtue of probability neglect. But the comparative merits of contingent-valuation and revealed-preference techniques for pricing packages of risk- and fear-reduction is not an issue I can address here.

1026

for an outcome W\* that differs from the baseline outcome W solely by virtue of the fact that P experiences fear in W\*. Details involving the choice of fear scale can also be bracketed: assume that individuals are placed in the binary categories of fearful/not fearful for a given day, and our fear assessment predicts the total fear-days resulting from hazards. P, then, experiences a certain incremental number of fear-days in W\* as compared to W. How to determine the money amount that, added to his resources in W\* (or subtracted from his resources in W), truly compensates him for the difference?

The deep difficulty in using market transactions or other behavioral evidence to value fear-days is that of untangling the subject's WTP/WTA to avoid the risk of a feared outcome, from his WTP/WTA to avoid fear itself. Typically, market transactions tie both benefits together. If I am scared of dving in a car crash, and pay more to buy a car with airbags, then what I have purchased is both peace of mind (fewer fear-days) and a reduced risk of the outcome I fear (dying in a crash). The incremental price of cars with airbags does not, in any direct way, reveal the WTP of car drivers for fearavoidance: rather, it directly reveals their WTP for the combination of fear-avoidance and risk-reduction. Similarly, if I am scared of being crushed on a factory floor, and demand higher wages to run that risk, then the wages are compensation both for the higher risk and for the additional anxious days I will experience as compared to a safer job. The wage differentials between safer and riskier jobs reveal WTP/WTAs for a package of goods, including but not limited to fearreduction.

Regression analysis might be thought to offer one route around this difficulty. Observed WTP/WTA data for market transactions that reduce the risk of feared outcomes might be "regressed" on various independent variables, including both the degree of risk-reduction and the number of fear-days reduced. The coefficient for the fear-day variable could be used to infer welfare equivalents for fear-reduction itself. Ian Savage employed roughly this methodology in a study where he correlated revealed-preference estimates of WTP to reduce the risk of different types of fatalities (specifically, fatalities caused by domestic fires, automobiles, air pollution, cigarettes,

<sup>139.</sup> See BATEMAN ET AL., supra note 136, at 182–91 (discussing the "bid function," which "explains the variation in WTP/WTA response based on the change in and the characteristics of the non-market good, prices of market goods, income and other socio-economic characteristics of the respondents").

airlines, and nuclear power) with individual dread of those fatalities, as measured by Slovic's psychometric surveys. 140 The problem here is the confounding effect of fear on choice under uncertainty; one of the problems that led us to separate risk assessment from fear assessment in the first place. Imagine that I can be seen paying \$100 for a smoke alarm, \$600 for an airbag, and \$6,100 for a house further from the nuclear plant, and that in each case my risk of death would be reduced by 1 in 10,000. It further emerges that the smoke alarm buys me no relief from fear (since I do not fear house fires); the airbag buys me ten days relief (the total time I would spend in an anxiety state in a car without an airbag); and the house away from the nuclear plant buys me 100 days relief (the total incremental fear-days I would experience with the closer house). Can we infer that my welfare equivalent not to experience a single fear-day is \$50-\$60, calculated as (1) the incremental WTP for the air bag or house (\$500 or \$6000) compared to a good, the smoke alarm, that produces the very same risk-reduction but no fear-reduction, divided by (2) the total fearreduction purchased with the air bag or house (ten or 100 days)?

This is a problematic inference, given the literature on probability neglect. An alternative and quite plausible explanation of the difference between my revealed valuations is that, because I am scared of car crashes and even more scared of nuclear plants, I irrationally overweight the risks associated with these. My very approach to choice changes by virtue of being afraid. More generally, a positive coefficient on the fear-days variable in a regression equation predicting revealed WTP could indicate a positive WTP to avoid the outcome of fear, or it could reflect increasingly panicky choosers.<sup>141</sup>

A different revealed-preference approach to disentangling the values of fear-reduction and risk-avoidance might focus on a special class of market transactions—those where the only good purchased is fear-reduction. For example, we might observe what anxious individuals pay for psychiatric services to alleviate their distress. This

<sup>140.</sup> See Ian Savage, Psychological Features Affecting Valuation of Life, 35 ECON. LETTERS 379 (1991).

<sup>141.</sup> Yet more sophisticated regression techniques *might* be able to distinguish between the impact on WTP for reduced risk of the chooser's present anxiety and the impact of the anticipated reduction in fear-days. Make our independent variables (*inter alia*) fatality risk reduction, fear-days reduced, and the present fearfulness of the actor whose WTP is being observed. This could do the trick—but there might well be a sample size problem, since welfare equivalents for anticipated fear-days would be revealed by choosers whose present fearfulness is zero, and the number of such fearless choosers identified in studies of the relevant market transactions (those involving feared outcomes) could well be small.

approach is intriguing, but still problematic. First, anxious individuals do not know, when they purchase anxiety-reduction services, what the actual degree of anxiety-reduction will be. What we observe, then, is their WTP/WTA for a lottery with respect to fear-reduction; this WTP/WTA amount is good evidence of their welfare equivalent for that lottery, or a good basis for deriving their welfare equivalent for a certain change in fear states, only on the assumption that the individuals behave in rough conformity with expected utility theory—a heroic assumption, surely, for the population suffering sufficiently serious anxiety to consult psychiatrists. Second, the fact that a substantial portion of those purchasing anxiety-reduction services are phobics may also skew their revealed WTP/WTA for fear-reduction away from the average welfare equivalent for the general population; as already explained, phobia is a nonstandard case of fear, since core fear involves belief, not merely thought. Finally, and most importantly, the appropriate emotional condition for a subject attempting to determine his welfare equivalent for fear-reduction is a calm state, not a fearful state. P's welfare equivalent for some outcome or lottery is the amount that he would accept or pay for the outcome or lottery, were he to be calm (not fearful or otherwise aroused) and well informed and to have deliberated thoroughly.142

Fortunately, revealed-preference techniques are not the only game in town. The contingent-valuation technique is now accepted by a substantial segment of the economics community. Literally thousands of such studies have been undertaken by applied economists; a large theoretical literature focused on improving the technique's validity and reliability has developed; and WTP/WTA estimates derived from contingent-valuation studies are regularly employed by agencies, both in the course of CBA and in other contexts. The bulk

<sup>142.</sup> See infra Part IV.B.

<sup>143.</sup> See Ian J. Bateman & Kenneth G. Willis, Introduction and Overview, in VALUING ENVIRONMENTAL PREFERENCES, supra note 136, at 1-5 (describing continuing controversy over contingent valuation, characterized by both substantial support for and opposition to the method in the economics community).

<sup>144.</sup> See Richard T. Carson et al., A Bibliography of Contingent Valuation Studies and Papers (Natural Resource Damage Assessment Inc., 1995) (unpublished paper).

<sup>145.</sup> See, e.g., FREEMAN, supra note 23, at 161–87 (summarizing efforts to improve method); Richard C. Bishop et al., Contingent Valuation, in HANDBOOK OF ENVIRONMENTAL ECONOMICS, supra note 101, at 629, 629–54 (reviewing literature on validity of contingent valuation).

<sup>146.</sup> See Bateman & Willis, supra note 143, at 1–5; John B. Loomis, Contingent Valuation Methodology and the US Institutional Framework, in VALUING ENVIRONMENTAL PREFERENCES, supra note 136, at 613, 613–27.

of studies conducted to date focus on public environmental goods. But this is neither in principle nor in practice a methodology merely for valuing cleaner parks and richer ecosystems. Health economists have used interviews to elicit WTP/WTA for a range of disease states, inter alia "light morbidity" conditions such as angina; throat, sinus, or head congestion; headache; runny nose; cough and sneeze; eye irritation; nausea; and shortness of breath.147 These are roughly analogous qua well-being to anxiety in that they can occur in acute (short term) as well as chronic form, and in degrees of intensity; the welfare impact of the less intense acute form is largely hedonic (a day with a moderate headache, like a day spent moderately anxious, is a welfare setback largely because it feels bad); and the chronic or intense forms. like chronic or intense anxiety, will also have nonhedonic impacts such as avoided activities. The contingent-valuation technique should be no less applicable to fear/anxiety than to "light" physical diseases such as headaches, nausea, and angina. Nor should it be less applicable to fear/anxiety than to psychiatric conditions, or the pain and awareness states that concern anesthesiologists. The contingentvaluation technique is beginning to make headway into the literature on mental health economics, where it has been used to value depression,148 and the literature on anesthesia, which now includes published studies eliciting WTP/WTA to avoid intraoperative awareness.149

Surprisingly, given the range of diseases and experiences for which WTP/WTAs have been elicited through interviews, the contingent-valuation literature on fear or anxiety itself is almost

<sup>147.</sup> See, e.g., Johnson, supra note 67; Tolley, supra note 67. On the use of contingent-valuation interviews to value health states, see generally VALUING HEALTH FOR POLICY, supra note 56; Alan Diener et al., Health Care Contingent Valuation Studies: A Review and Classification of the Literature, 7 HEALTH ECON. 313 (1998); Thomas Klose, The Contingent Valuation Method in Health Care, 47 HEALTH POLICY 97 (1999); Jan Abel Olsen & Richard D. Smith, Theory Versus Practice: A Review of "Willingness-to-Pay" in Health and Health Care, 10 HEALTH ECON. 39 (2001); Richard D. Smith, Construction of the Contingent Valuation Market in Health Care: A Critical Assessment, 12 HEALTH ECON. 609 (2003).

<sup>148.</sup> See Jürgen Unützer et al., Willingness to Pay for Depression Treatment in Primary Care, 54 PSYCHIATRIC SERVICES 340 (2003). On economic evaluation (including cost-benefit evaluation) of mental health more generally, see S. M. A. A. Evers et al., Economic Evaluation of Mental Health Care Interventions: A Review, 6 HEALTH ECON. 161 (1997); Andrew Healey & Daniel Chisholm, Willingness to Pay as a Measure of the Benefits of Mental Health Care, 2 J. MENTAL HEALTH POL'Y & ECON. 55 (1999); Bruce Singh et al., The Role of Economic Evaluation in Mental Health Care, 35 Australian & New Zealand J. Psychiatry 104 (2001).

<sup>149.</sup> See Tong J. Gan et al., How Much Are Patients Willing to Pay to Avoid Intraoperative Awareness?, 15 J. CLINICAL ANESTHESIA 108 (2003); Kate Leslie et al., Patients' Knowledge of and Attitudes Towards Awareness and Depth of Anaesthesia Monitoring, 31 ANAESTHESIA & INTENSIVE CARE 63 (2003); see also Debora Matthews et al., Putting Your Money Where Your Mouth Is: Willingness to Pay for Dental Gel, 20 PHARMACOECONOMICS 245 (2002) (evaluating WTP for novel, noninjectable dental anaesthetic).

1030

nonexistent. I have identified only a single study where respondents were asked directly for their monetary valuation of a fear or anxiety state: Zeidner and Shechter's study of Israeli university students, which inquired about WTP to reduce test anxiety. <sup>150</sup> Other contingent-valuation studies have measured the respondents' anxiety, and included that as one of the independent variables in an estimated "bid function," with WTP/WTA to reduce risk or purchase other goods as the dependent variable <sup>151</sup>—but for reasons that should now be evident, these sorts of contingent-valuation studies (like their revealed-preference counterparts) are a problematic basis for inferring the cost of fear.

The case against contingent valuation of fear, if there is one, will have to be generic, not specific. It is hard to see why the technique would be appropriate for environmental goods, but not health states; or serious diseases, but not light morbidity; or light morbidity and certain mental states (for example, headaches or intraoperative awareness) but not fear. The claim would have to be that contingent valuation, in general, is a flawed tool for measuring WTP/WTA (or, on my conceptualization of CBA, for measuring the objectivist correlate to WTP/WTA, namely welfare equivalents). And general claims of this sort certainly have been advanced;<sup>152</sup> indeed, the debate between the proponents of contingent valuation and its global critics has generated a mini-literature within economics.<sup>153</sup>

It is well beyond the scope of this Article to engage that debate in a thorough way. (I have already stated, and should stress, that my

<sup>150.</sup> See Moshe Zeidner & Mordechai Shechter, Reduction of Test Anxiety: A First Attempt at Economic Evaluation, 7 ANXIETY, STRESS, & COPING 1 (1994).

<sup>151.</sup> See David N. Fisman et al., Willingness to Pay to Avoid Sharps-Related Injuries: A Study in Injured Health Care Workers, 30 Am. J. INFECTION CONTROL 283 (2002); Stephanie J. Lee et al., Patients' Willingness to Pay for Autologous Blood Donation, 40 HEALTH POL'Y 1 (1997); Mandy Ryan, Valuing Psychological Factors in the Provision of Assisted Reproductive Techniques Using the Economic Instrument of Willingness to Pay, 19 J. ECON. PSYCHOL. 179 (1998); Ian Savage, An Empirical Investigation into the Effect of Psychological Perceptions on the Willingness-to-Pay to Reduce Risk, 6 J. RISK & UNCERTAINTY 75 (1993); Bruce H. Smith, Anxiety as a Cost of Commuting to Work, 29 J. URB. ECON. 260 (1991); Eric Thunberg & Leonard Shabman, Determinants of Landowner's Willingness to Pay for Flood Hazard Reduction, 27 WATER RESOURCES BULL. 657 (1991); Zeidner & Shechter, supra note 41.

<sup>152.</sup> See, e.g., CONTINGENT VALUATION: A CRITICAL ASSESSMENT (Jerry A. Hausman ed., 1993).

<sup>153.</sup> See, e.g., Peter A. Diamond & Jerry A Hausman, Contingent Valuation: Is Some Number Better than No Number?, 8 J. Econ. Persp. 45 (1994) (presenting criticisms); Peter A. Diamond & Jerry A. Hausman, On Contingent Valuation Measurement of Nonuse Values, in Contingent Valuation, supra note 152, at 3-38 (presenting criticisms); Kevin J. Boyle & John C. Bergstrom, Doubt, Doubts, and Doubters: The Genesis of a New Research Agenda?, in Valuing Environmental Preferences, supra note 136, at 183 (surveying criticisms).

opposition to revealed-preference techniques is specific, not generic: the dual role of fear as a consequence of choice and a condition of the chooser undercuts the technique's usefulness in the particular domain of "unbundled" fear assessment.) Suffice it to say that all but one of the generic objections to contingent valuation seems misplaced, at least in the case of fear. One set of objections focuses on cognitive limitations or biases that can be overcome by changing the form of the interview. For example, answering the open-ended question "What is the maximum amount you are willing to pay/accept for ?" is cognitively quite demanding; and reducing this cognitive load through a "bidding game," where respondents are presented with increasing monetary amounts, and asked about willingness to trade the good for these amounts until a maximum is reached, leads to WTP/WTA estimates that are biased by the initial bid (an instance of anchoring bias). But both these problems are avoided through the dichotomous choice format that is currently popular.<sup>154</sup>

A different objection is that answers to contingent-valuation surveys express moral judgments or political views, rather than the sorts of preferences relevant to CBA, namely self-interested ones. Critics voicing this objection often point to so-called "scope" problems: cases in which expressed WTP/WTA is invariant to the scope of the good being evaluated, such as Desvouges' well-known study where different groups of respondents expressed nearly identical mean WTPs to save 2,000, 20,000, and 200,000 migratory waterfowl.<sup>155</sup> The problem here has more to do with the good being valued than the valuation format-preferences for environmental goods revealed through contributions to the Sierra Club also are typically moral rather than selfinterested preferences—and in any event is unlikely to carry over to the contingent valuation of fear or other experiential or health states. the heartland of self-interested preferences. Not surprisingly, a recent survey of health care contingent-valuation studies found little evidence of scope-invariance. 156

<sup>154.</sup> See BATEMAN ET AL., supra note 136, at 138-42.

<sup>155.</sup> William H. Desvousges et al., Measuring Natural Resource Damages with Contingent Valuation: Tests of Validity and Reliability, in CONTINGENT VALUATION, supra note 152, at 91, 99-102.

<sup>156.</sup> See Klose, supra note 147, at 105-09. Cf. Alan Shiell & Lisa Gold, Contingent Valuation in Health Care and the Persistence of Embedding Effects Without the Warm Glow, 23 J. ECON. PSYCHOL. 251 (2002) (finding "embedding effects" in health care contingent-valuation study designed to exclude moral preferences).

1032

What about the oft-heard claim that contingent valuation asks about hypothetical choices, while market and other revealedpreference data evidence actual choices? The respondent is being asked to compare a baseline lottery or outcome to a different lottery or outcome packaged with compensating changes to the respondent's wealth position, where these options are neither his to choose, nor even the government's to choose (since the actual options being considered by the government do not involve the hypothesized changes in respondent's wealth). It is hard to know what to make of this objection. Surely non-actual objects (choices, outcomes, things) can, in principle, be evaluated by humans. For example, the expected utility model of choice asks humans to value non-actual outcomes—the merely possible consequences of the agent's choices. Perhaps the thought is that contingent-valuation questions, qua hypothetical, are cognitively difficult. But this, once more, would seem to be more a question of the good evaluated than the elicitation method: consider the cognitive demands of deciding whether to buy a house, given its architecture and decor, possibly hidden defects, physical setting, immediate neighborhood, proximity to other goods and bads, and investment value. Thinking about willingness-to-pay to avoid anxiety, at least in the case of acute anxiety that has a relatively "local" effect on well-being, is no harder than thinking about willingness-to-pay for small consumption goods, and in the case of anxiety with more global effects would not seem to pose qualitatively greater cognitive demands than thinking about willingness-to-pay for a house, an education, or longevity.

Perhaps the complaint about the "hypothetical" cast of contingent-valuation questions goes to the respondents' seriousness. Respondents evaluate these hypothetical choices in a quick, off-hand way. This is a serious complaint, particularly for my purposes, since welfare equivalents presuppose thorough deliberation. The complaint is one part of a broader objection, namely that contingent-valuation surveys do not produce sincere and truthful answers. Stated preferences do not represent respondents' real preferences: either because they have not thought enough to formulate those preferences, or because they have but are lying for strategic reasons. On the last count: it is well known that self-interested actors will often have an incentive

to overstate or understate their WTP/WTA, depending on the interview format.<sup>157</sup>

The objection is surely worrying. Still, I do not think it is decisive against using contingent-valuation studies to value fear. First, respondents to these surveys, and to surveys more generally, seem often to be more honest than is rational in light of self-interest. 158 Second, and relatedly, interview format can help encourage honesty and deliberational work. (For example, paying respondents for their time can intensify guilt feelings that, intuitively, would help counteract shirking and lying.) Third, the fact that some respondents can be predicted to give untruthful responses to interview questions need not erase the epistemic value of the interviews. Randomly untruthful responses are one thing; but if I have theoretical grounds for believing in a correlation between stated and real preferences, e.g., for believing that strategic untruths in a given context will overstate real welfare equivalents, then the contingent-valuation data will provide some evidence of real welfare equivalents. Finally, worries about sincerity and honesty provide no reason at all to use revealed-preference rather than contingent-valuation techniques insofar as the revealedpreference techniques incorporate self-report measures of fear. Understand that the revealed-preference technique will correlate the subjects' fear states with their WTP/WTA to mitigate those states or reduce the chance of the outcomes that the subjects fear. But characterizing the subjects' states may well involve interviews: interviews to determine how scared they are. For example, the "dread" variable upon which Ian Savage regressed revealed WTP to avoid deaths from domestic fires, automobiles, air pollution, cigarettes, airlines, and nuclear power was derived from Slovic's psychometric work, and that in turn was grounded on survey data where respondents were interviewed to determine how they viewed different hazards. 159 Why assume that respondents to Slovic's interviews are truthful, while respondents to contingent-valuation interviews are not?

To be sure, fear measures grounded in observer-reports rather than self-reports do exist. A psychiatrist or some other expert might be asked to scale the fearful individual's anxiety, as evidenced by her

<sup>157.</sup> See, e.g., Robert Sugden, Public Goods and Contingent Valuation, in VALUING ENVIRONMENTAL PREFERENCES, supra note 136, at 131, 135-39.

<sup>158.</sup> See id. at 137-38.

<sup>159.</sup> See Savage, supra note 140, at 382; Paul Slovic et al., Characterizing Perceived Risk, in PERILOUS PROGRESS: MANAGING THE HAZARDS OF TECHNOLOGY 91 (Robert W. Kates et al. eds., 1985).

#### CHICAGO-KENT LAW REVIEW

behavior or physiology; that observer-reported measure might then be correlated with the subject's purchasing activities to derive a revealed-preference measure of her WTP/WTA to avoid fear. But even this technique may presuppose more honesty and sincerity than axioms of individual rationality and self-interest would predict—by presupposing that the psychiatrist or other observer has truthfully communicated the fear state he observes, and has put some effort into the observation. In short, a substantial degree of trust (be it in subjects or observers) seems to be as much a precondition of revealed-preference techniques as of contingent-valuation techniques, and if so the problem of respondent honesty and sincerity is no grounds for abandoning the second set of techniques in favor of the first.

#### IV. USING CONTINGENT VALUATION TO VALUE FEAR STATES

I have argued that "contingent valuation" interviews should be used to attach a money price to fear states, at least where agencies engage in "unbundled" fear assessment. But what, precisely, is being valued? And whose valuations count? This Part engages these fundamental issues, then considers and endorses the thought that indirectly as well as directly derived money prices might be useful for CBA. By "directly derived," I mean a money price elicited through a classic contingent-valuation interview: one where the respondent is asked for her WTP/WTA. By "indirectly derived," I mean an interview format where the respondent is asked to measure fear on some other scale of well-being, such as a QALY scale, and these measurements are then converted to WTP/WTA through some standard conversion factor.<sup>160</sup>

[Vol 79:977

<sup>160.</sup> Another question is whether fear is priced ex post or ex ante. Should the fear assessor (say) estimate the mean difference in fear-days as between different regulatory options, and then price this difference using an ex post valuation of a fear-day derived from contingent valuation? Or should she, instead, characterize the lottery over fear states that different members of the population face, and employ contingent valuation to price these lotteries? This Part assumes that the first approach, or something like it, is correct, given the extra deliberation costs of ex ante valuation, and discusses the design of contingent-valuation interviews to capture an ex post valuation of fear. But the claims in this Part generally carry over to ex ante valuation. Specifically, ex ante valuations could focus (narrowly) on the intrinsic costs of fear, or (more encompassingly) on instrumental as well as intrinsic costs; the evaluators should be calm, not fearful; and appropriate QALY measures could be translated into ex ante monetary valuations.

2004] FEAR ASSESSMENT 1035

#### A. What is a Fear State?

"Unbundled" fear assessment asks CBA analysts to disaggregate two kinds of welfare costs that regulatory choices may have: the bad outcomes that prompt fear (deaths, injuries), and fear itself. Relatedly, contingent-valuation interviews should be the core technique for monetizing fear itself. These claims have an obvious implication for the design of the requisite contingent-valuation interviews. Those should be focused tightly on fear states, not on a looser amalgam of fear states and feared outcomes, as most interview work to date in this area has been. An illustrative example: Fisman et al. surveyed health care workers who reported a sharps-related injury while handling a contaminated medical device, asking "Suppose there was a reusable device that could have prevented your injury. Knowing what you know now, would you have paid \$X out of pocket for such a device?"161 The median time from injury to interview was three days, and although some of the interviewees had obtained definitive information about their risk of infection, some had not. Not surprisingly. the median reported WTP to avoid the injury was \$850, substantially larger than WTP/WTA amounts elicited in contingent-valuation interviews for headache-days, angina-days, cold- and cough-days, and other light morbidities that (intuitively) should be roughly comparable in their welfare impact to fear. 162 Workers in the Fisman study who had not yet learned their infection status would be paying to avoid both the risk and the fear of infection, and presumably even some of those who had received a negative test prior to the contingent-valuation interview ascribed a nonzero probability to the infection outcome, for example, because of test inaccuracy.

Zeidner and Shechter, in their contingent-valuation study of exam anxiety among Israeli students, did focus narrowly on fear states. 163 This study illustrates a different point, one that to this point I have downplayed: namely, that fear states themselves are heterogeneous in their impact on human well-being. Students in two required introductory courses, one in economics and the other in education, were asked about willingness-to-pay to reduce their exam anxiety. The interviews occurred towards the end of the semester, prior to the

<sup>161.</sup> See Fisman et al., supra note 151, at 284.

<sup>162.</sup> See infra text accompanying note 193.

<sup>163.</sup> See Zeidner & Shechter, supra note 150. A different Zeidner and Shechter contingent-valuation study estimates willingness-to-pay to reduce air pollution as a function (inter alia) of anxiety. See supra note 41 and text accompanying note 151.

1036

final exam in both classes. Economics students had on average a higher WTP. A partial explanation of the difference, Zeidner and Shechter suggest, is that anxiety had greater expected professional costs for the economics students than for the education students. Although a passing grade in both courses was required for further coursework in the respective majors, the pass rate in economics was much lower than that in education. Thus anxiety was less likely to prevent the education students, as compared to the economics students, from passing their tests and continuing in their majors. Fear states are both intrinsically bad (as a kind of negative experiential state) and instrumentally bad (insofar as fear causes or partly constitutes other welfare setbacks). The WTP values elicited in the Zeidner/Shechter study reflected the students' willingness-to-pay to avoid the combination of the intrinsic and instrumental costs of fear; because fear had greater instrumental costs, qua professional success, for the economics students, their WTP amounts were higher.

The distinction between the intrinsic and instrumental welfare effect of fear states is crucial. Any self-conscious and decently theorized practice of fear assessment must take account of that distinction. To see it in a more general way, consider Martha Nussbaum's list of objective welfare goods—the broadest and arguably the best list in the current philosophical literature: (1) life; (2) bodily health; (3) bodily integrity; (4) senses, imagination, and thought ("[bleing able to use the senses, to imagine, think, and reason"); (5) emotions (inter alia "[n]ot having one's emotional development blighted by . . . fear and anxiety); (6) practical reason ("[b]eing able to form a conception of the good and to engage in critical reflection about the planning of one's life"); (7) affiliation ("[b]eing able to live with and toward others,... to engage in various forms of social interaction"); (8) other species; (9) play ("[b]eing able to laugh, to play, to enjoy recreational activities"); (10) control over one's environment. 164 P's fear is, without more, a setback with respect to Nussbaum's fifth dimension of welfare: the "emotions" dimension. But P's fear may also cause him to refrain from activities that would be beneficial with respect to other welfare dimensions. For example, if P is afraid of some object or activity he may substitute a different, more dangerous one, thus risking his life or health (dimensions one and two). P's fears may lead him to refrain from activities that advance his goals (dimension six), or from social interaction (dimension seven). If P's fears hinder his productivity, either because he is scared of particular workplaces or because a general anxiety state makes him less productive in any workplace, then fear might cause a drop in P's income, in turn causing setbacks with respect to all the dimensions for which money is useful (dimensions 1–10).

The causal impact of fear states on welfare goods is one kind of "instrumental" impact, but not the only kind. I am using "instrumental" to mean any nonintrinsic impact, where in turn an intrinsic impact is one that occurs solely in virtue of fear's experiential features. Fear can be an "instrumental" welfare setback either by causing other harms, or by displacing the experiential states that are one component of a larger good encompassing both experiential and nonexperiential features. Consider Nussbaum's ninth dimension, play or recreation. To recreate is to engage in certain activities, and to experience pleasure as a result. If P is scared of the toxin in his soil and "goes through the motions" of recreating in his backyard, but his fear state crowds out any enjoyment from these activities, then this fear has (noncausally) produced a cost with respect to dimension nine. An even more important example, arguably, involves Nussbaum's fourth, sixth and seventh dimensions. Theoretical reason, practical reason, and affiliation are (arguably) welfare goods that essentially include an enjoyment component. How good for P is a friendship in which he takes little pleasure (because he's in an anxiety state), or a practical or intellectual accomplishment that he cannot savor?

Incorporating the instrumental effect of fear within fear assessment is a complicated question, about which I lack firm views. One is tempted to think that a further unbundling might work here: for any given fear state, we can predict the (lottery over) other bad outcomes that the state might produce, and value the fear state as the sum of the intrinsic cost of fear, plus the (expected) cost of those other outcomes as priced using standard values. For example, if P experiences 100 fear-days, and cuts back his recreational activities as a result, then the cost of fear is the experiential cost of the 100 days, plus the foregone benefit of the activities as measured by the market prices of those activities or by revealed-preference or contingent-valuation studies generally pricing the activities. The problem here is

<sup>165.</sup> In other words, "averting behavior" undertaken to avoid a perceived risk might be ascribed the same cost, regardless of whether the actor is fearful or fearless. On pricing "averting behavior," see, e.g., FREEMAN, supra note 23, at 337–38; George Tolley & Robert Fabian, Future Directions for Health Value Research, in VALUING HEALTH FOR POLICY, supra note 56, at 300, 315–16.

that fear may have the effect of deflating the welfare value of the recreational activities that P continues to engage in—an effect not captured by focusing merely on the foregone activities and valuing those activities at the price that the population in general, anxious and nonanxious alike, is willing to pay for them. 166 P goes to the park fifteen times instead of twenty, but the fifteen trips are not as enjoyable as fifteen trips in a nonfearful state; thus P's welfare equivalent for the instrumental effect on his recreation is greater than the foregone five trips multiplied by the amount he would have paid for those five trips in a nonfearful state (estimated by generic measures for the trips such as the market price of park entry or generic travel-cost studies.) More generally, insofar as experiential states have a constitutive role with respect to welfare dimensions such as affiliation, practical reason, or play that hybridize both experiences and other things, someone's welfare equivalent for a fear state cannot be accurately decomposed into the sum of WTP/WTA for the bad experience plus WTP/WTA for the change with respect to the nonexperiential features of these additional dimensions. 167

Yet CBA routinely tolerates inaccuracies, given deliberation costs. Is estimating the cost of a fear state as the sum of the intrinsic cost of fear, plus the instrumental cost as priced using generic values, any different from (say) the multiple inaccuracies currently tolerated in the pricing of life? There, too, much heterogeneity is suppressed. If the intrinsic and instrumental aspects of fear are not unbundled, for CBA purposes, the prospect of standardizing (and thereby economizing on the costs of) fear assessment through a standard tariff of fear prices becomes dimmer. Perhaps agencies might distinguish between

<sup>166.</sup> There is a loose analogy, here, to the way in which physical disability can change the utility of money. See Alan Schwartz, Proposals for Products Liability Reform: A Theoretical Synthesis, 97 YALE L.J. 353, 364 (1988).

<sup>167.</sup> The point I'm making here can be rephrased in the language of multiattribute utility theory, more familiar to economists than talk of "intrinsic" and "instrumental." A person's objective well-being, my concern in this Article, cannot be accurately represented as her location on robustly independent dimensions such that (1) a fear state constitutes a change only with respect to one dimension, namely some kind of experiential dimension; (2) changes with respect to other dimensions have the same effect on the person's well-being, regardless of her location on the fear dimension, and vice versa. Rather, the best representation consists of an experiential dimension E plus other dimensions  $D_1 \dots D_n$ , where some of the  $D_i$  are not even conceptually independent of E (it is impossible to concatenate all locations in E with all locations in these other dimensions) or if conceptually independent, interact with E in a complicated way to determine the subject's well-being. In either event, P's welfare equivalent for the change produced by fear with respect to  $D_1 \dots D_n$  must take account of his location on dimension E. WTP/WTA amounts for  $D_1 \dots D_n$  changes, elicited in generic contingent-valuation or revealed-preference studies where respondents or actors may well be located at a different point in the E dimension than P himself, are imperfect evidence of P's welfare equivalent for those changes.

two subpopulations within the group of persons whose fear states are influenced by agency choices: a subpopulation whose lives are "locally" affected by fear (the fear resulting from agency choice constitutes an intrinsic setback for them, plus perhaps induces behavioral changes, but does not alter the welfare-value of their activities in a pervasive way), and a subpopulation whose lives are "globally" affected. Standard values could be used to price fear-days and avoided activities within the "locally" affected group; these standard values for fear-days would be derived from contingent-valuation studies focusing solely on the intrinsic cost of fear. To price the impact of fear on the "globally" affected subpopulation, an agency could rely upon a more specialized and holistic contingent-valuation study: one eliciting WTP/WTA for the combination of fear-days plus the other welfare changes (professional, social, recreational, etc.) that persons within this subgroup would undergo.

The difficult issues sketched here are fodder for future research. I have not taken a position on the shape of optimal agency practice, but have simply described a basic problem that any agency engaged in fear assessment and designing or employing interviews to value fear states would need to confront. The point to recognize is that fear sometimes has wider effects than the purely experiential. Contingent-valuation studies of fear states might be localized, targeted just at the intrinsic harm, or holistic, targeted at bundles of intrinsic harms plus others. Fear assessment surely will rely upon localized studies—at a minimum, where the fear produced by agency choice is just a local harm, as was true of the very short-term anxiety states that the FDA priced in the gloves rulemaking. But holistic studies might also be a part of optimal CBA.

#### B. Whose Valuations Count?

The respondents in a contingent-valuation study of fear (be it a localized study focused on fear's intrinsic harms, or a holistic study encompassing both intrinsic and instrumental harms) might themselves be in a fear state, or they might be calm. Assuming that variations in respondents' fear characteristics produce variations in WTP/WTA—as might well occur<sup>168</sup>—which set of valuations is

<sup>168.</sup> Cf. G. Ardine de Wit et al., Sensitivity and Perspective in the Valuation of Health Status: Whose Values Count?, 9 HEALTH ECON. 109, 110 (2000) (surveying thirty-eight QALY studies in which different groups were asked for valuation of the same health state, and finding that

1040

normative for CBA? This question parallels a general question mooted by health economists: should the respondents to QALY surveys be patients, or rather healthy individuals (such as doctors or members of the general population)? Many QALY studies of both kinds have been done; often diseased and healthy individuals provide different QALY values for the same disease state; and which QALY value should count for health policy analysis is controversial.<sup>169</sup>

My response to this problem of specifying respondents' anxiety condition in contingent-valuation interviews pricing fear, and more generally respondents' physical or psychological condition in any study eliciting money or QALY measures of well-being, is to recur to the objectivist account of welfare that-I have argued-undergirds interpersonal comparisons and therewith CBA and related kinds of policy analysis. Objective goods, I have claimed, are features of outcomes that idealized observers prefer. But what does "idealized" mean? In eliciting WTP/WTA for (say) a highly anxious state, as compared to a baseline (say, mildly anxious) state, the respondent might be: (1) absolutely calm; (2) mildly anxious; (3) highly anxious; or (4) panicked. Note that the respondent's anxiety state can, but need not, match either of the states being evaluated.<sup>170</sup> Both outcomes can be hypothetical, not occurrent. So it is our account of welfare goods, not the evaluative task at hand, that fixes the respondent's appropriate emotional condition. But what does that account stipulate?

The most sophisticated work developing an idealized preference account of welfare has been done by Peter Railton.<sup>171</sup> Railton defines a person's good as "what he would want himself to want, or to pursue, were he to contemplate his present situation from a standpoint fully and vividly informed about himself and his circumstances, and

<sup>&</sup>quot;[t]wenty-seven of the 38 studies concluded that patient values are different or sometimes different from other groups' values").

<sup>169.</sup> See id.; see also Diener, supra note 147, at 320 (surveying contingent-valuation studies of health and finding variation in disease status of respondents).

<sup>170.</sup> Cf. de Wit et al., supra note 168, at 110 (summarizing study designs for comparing different groups' QALY valuations of health states, many of which ask respondents to value a hypothetical state rather than their actual state).

<sup>171.</sup> See Peter Railton, Facts and Values, 14 PHIL. TOPICS 5 (1986); Peter Railton, Moral Realism, 95 PHIL. REV. 163, 171–84 (1986); see also Connie S. Rosati, Persons, Perspectives, and Full Information Accounts of the Good, 105 ETHICS 296, 299 & n.7 (1995) (stating that "[Richard] Brandt and Railton provide the most developed discussion of what it is for a person to be fully informed" and treating Railton's position "as providing the standard formulation of Ideal Advisor views [of welfare], since it avoids problems to which other formulations are subject [including Brandt's] and thus can be regarded as the most fully developed such view").

entirely free of cognitive error or lapses of instrumental rationality." This definition, and Railton's discussion, emphasizes information, cognition, and means-end rationality as components of the idealized observer's condition. Railton does not discuss the observer's emotional state, and so one must infer what his account would imply about that. Means-end rationality is certainly relevant here—at least if means-end rationality is understood to encompass the axioms of expected utility theory, as I believe it should. As we saw earlier, the literature on "probability neglect" suggests that fearful individuals are even worse than calm individuals at processing probabilities in accordance with expected utility theory. This seems to imply that Railton's idealized observer is calm, not fearful.

In response, it might be objected that probabilities are irrelevant to the particular valuational exercise being considered in this Part: the comparison of an outcome in which the respondent undergoes a particular anxiety experience for certain, to one in which he for certain does not undergo that experience. But in other contexts we will want to determine which lottery, rather than certain outcome, is better for a person—for example, in determining his welfare equivalent for a risk of death or bodily injury. It would be odd to vary the emotional characteristics of the idealized observer, such that he or she is stipulated to be calm in comparing lotteries but anxious in comparing certain outcomes.

Further, a contingent-valuation exercise putatively focused on a certain outcome will, inevitably, involve a suppressed lottery. Consider the question: "How much are you willing to pay to spend tomorrow in a calm state as opposed to a highly anxious state?" The alternatives being compared—the respondent's being calm tomorrow versus the respondent's being highly anxious tomorrow—are not maximally specified outcomes, complete "possible worlds." Rather, they are individual states of affairs that specify one attribute of a complete possible world. The respondent is asked to value alternatives that vary with respect to this attribute; the multiplicity of other attributes of possible worlds are not stipulated, and the respondent (if rational) will handle the valuational exercise by attaching probabilities to the remaining attributes, or at least some of them. In other words, the alternatives under comparison in this and every contingent-valuation interview are, in effect, lotteries: in this case, a lottery

1042

in which respondent's being calm tomorrow has probability one, but his emotional state thereafter, his future wealth position, and many other things about him are uncertain, versus a lottery in which his being anxious tomorrow has probability one and all these other things are once more uncertain.<sup>173</sup>

What about the cognitive and informational elements of Railton's idealization: the stipulation that the observer be "fully and vividly informed about himself and his circumstances, and entirely free of cognitive error"? Fear does not preclude cognition. Indeed, core fear as I understand it entails cognition—a belief, which could well be true or warranted, that the subject has a nontrivial probability of being physically harmed. But one might ask whether the fearful or calm observer is better situated to grasp the array of ancillary true facts that may be relevant to valuing fear states. Believing a true fact is more than merely registering that fact; it means having that fact play a deliberational role. Some of the literature on anxiety suggests that fear involves an attention to the feared outcome, and perhaps a higher-order attention to the fear state itself, that (intuitively) would dampen the deliberational role of other facts.<sup>174</sup> For example, imagine that a somewhat holistic contingent-valuation study is being conducted, where respondents are asked to consider not just the intrinsic experiential badness of fear, but the deleterious health effects that might result from protracted fear. One group of respondents, some fearful and others calm, are credibly informed that these effects are large; another group, again with fearful and calm subgroups, is credibly informed the opposite. Intuitively, the calm respondents' valuations of the fear states should vary more than fearful respondents'.

A related issue—less cognitive than imaginative—is whether fearful or calm respondents are better able vividly to represent to themselves the emotional states being compared. Calm respondents are given descriptions of the various mental elements constituting a more anxious state (the arousal, the cognition, the affect) and a less anxious state. Ditto for anxious respondents. Which group is better able to imagine what it would be like to be in both states? Again, the attentional characteristics of fear would seem to imply that (ceteris paribus) calm respondents are better able to imagine both states than

<sup>173.</sup> The same would be true (a bit less obviously) in a more holistic contingent-valuation interview.

<sup>174.</sup> See BARLOW, supra note 35, at 249-55; Ben Searle et al., Cognition, Stress and Anxiety, in STRESS: MYTH, THEORY AND RESEARCH, supra note 38, at 89, 93-99.

fearful respondents. The "ceteris paribus" clause is very important here. It may well be true that a currently fearful individual who's been calm at many points in the past is better able to imagine both fear states and calm states than a calm person who has never been afraid. But, as between a currently calm person with past experience of fear, and a currently anxious person with past experience of calm, the former is plausibly better situated to imagine fearful and calm states, as well as to give deliberational weight to ancillary facts and to process probabilities.

To be sure, the issues discussed in the last few paragraphs are squarely empirical ones. If experimentation in psychology reveals that fearful individuals, albeit worse at processing probabilities in accordance with expected utility theory, are (otherwise) more deliberationally sensitive to relevant facts, and more imaginative, then the case for grounding fear assessment on anxious rather than calm valuations of fear and anxiety would be strong.

#### C. Deriving Fear Prices from QALYs

The "QALY" and contingent-valuation methods are parallel, interview-based techniques for measuring value, differing mainly in the kind of scale used. In the contingent-valuation format, respondents are asked to use a money scale. In the QALY format, respondents are asked to rank outcomes—standardly, health states—on a 0–1 scale, with 1 representing the very best state, and 0 representing death.<sup>175</sup> They may be asked to make an intuitive assignment of numbers to states, or rather instructed to use a technique that generates numbers, most typically the "standard gamble" or "time trade off" techniques.<sup>176</sup> Many hundreds of published QALY studies now exist,<sup>177</sup>

<sup>175.</sup> The number 0 is sometimes assigned to the worst state, not death. See Paul Kind, The EuroQoL Instrument: An Index of Health-Related Quality of Life, in QUALITY OF LIFE AND PHARMACOECONOMICS IN CLINICAL TRIALS 191, 194 (Bert Spilker ed., 2d ed. 1996).

<sup>176.</sup> For overviews of the QALY method for measuring health states, see DOUGLAS MCCULLOCH, VALUING HEALTH IN PRACTICE: PRIORITIES, QALYS, AND CHOICE (2003); ERIK NORD, COST-VALUE ANALYSIS IN HEALTH CARE: MAKING SENSE OUT OF QALYS (1999); Paul Dolan, The Measurement of Health-Related Quality of Life for Use in Resource Allocation Decisions in Health Care, in 1B HANDBOOK OF HEALTH ECONOMICS 1723 (A. J. Culyer & J. P. Newhouse eds., 2000); Robert Fabian, The Qualy Approach, in VALUING HEALTH FOR POLICY, supra note 56, at 118; Robert M. Kaplan, Utility Assessment for Estimating Quality-Adjusted Life Years, in VALUING HEALTH CARE: COSTS, BENEFITS, AND EFFECTIVENESS OF PHARMACEUTICALS AND OTHER MEDICAL TECHNOLOGIES 31 (Frank A. Sloan ed., 1996).

<sup>177.</sup> See Chaim M. Bell et al., An Off-the-Shelf Help List: A Comprehensive Catalog of Preference Scores from Published Cost-Utility Analyses, 21 MED. DECISION MAKING 288, 289

1044

including some that provide QALY values for anxiety.<sup>178</sup> QALYs are also, sometimes, translated into dollar values using conversion factors.<sup>179</sup> Indeed, this is what FDA did in the gloves rulemaking to value infection-anxiety. It used a conversion value of \$373,000 for the loss of a single year of life at QALY level 1.

The OALY-to-dollars conversion technique is not uncontroversial. 180 but is acceptable for purposes of CBA as I conceptualize it if respondents are instructed to think of the QALY scale as a welfare scale—a point I will discuss in a moment—and if the conversion factor is appropriate. By an "appropriate" conversion factor, I mean one that produces a reasonably good estimate of subjects' welfare equivalents for changes in states—perhaps the average ratio of WTP/WTA values and OALY increments for changes in health states that have been valued using both techniques;<sup>181</sup> or the conversion factor implied by WTP/WTA for the risk of death, on the assumption that individuals value risks of premature death by valuing the risk of the QALY loss (relative to longer life) that premature death involves. 182 Specifying this conversion factor is an important problem for CBA that needs further analysis, which I cannot provide here, but there seems no reason in principle—on the view that CBA is a decision procedure implementing overall well-being—to resist the very idea of QALY-todollar conversions.

(2001) (finding 228 published "cost-utility" studies (*i.e.*, cost-effectiveness studies that use QALYS as the measure of effectiveness) published in English in the period from 1976 until 1997, with a total of 949 QALY valuations of health states).

178. See infra note 194 & accompanying text; Dennis G. Fryback et al., The Beaver Dam Health Outcomes Study: Initial Catalog of Health-State Quality Factors, 13 MED. DECISION MAKING 89, 94–97 (1993). On the use of QALYS in measuring mental health generally, see D. Chisholm et al., QALYs and Mental Health Care, 32 SOC. PSYCHIATRY & PSYCHIATRIC EPIDEMIOLOGY 68 (1997). On the use of non-QALY "quality of life" measures in evaluating anxiety, see, e.g., Mauro Mendlowicz & Murray B. Stein, Quality of Life in Individuals with Anxiety Disorders, 157 Am. J PSYCHIATRY 669 (2000). These alternative measures, typically, have multiple noncomparable subscales and do not provide a single overall number measuring the impact of a health state on well-being.

179. See, e.g., Tolley et al., supra note 67, at 327–29.

180. On the QALY-to-dollars conversion issue, see Richard A. Hirth et al., Willingness to Pay for a Quality-Adjusted Life Year: In Search of a Standard, 20 MED. DECISION MAKING 332 (2000). For a comparison of QALYs and WTP more generally, see James K. Hammitt, QALYs Versus WTP, 22 RISK ANALYSIS 985 (2002); Patrick Hofstetter & James K. Hammitt, Human Health Metrics for Environmental Decision Support Tools: Lessons from Health Economics and Decision Analysis (EPA Office of Research and Development, 2001).

181. See Johnson, supra note 67 (correlating QALY and WTP values for short-term health conditions).

182. See Tolley et al., supra note 67, at 328–29 (converting QALY values to dollar values using a dollar value of a life year derived from the value of statistical life).

In the case of anxiety, an indirect measure of WTP/WTA, generated via QALYs, would be particularly useful given the paucity of direct contingent-valuation studies. Indirect measures, here and elsewhere, also have an epistemic role: they help test the validity of direct measures.

How, then, should a QALY interview for valuing anxiety be structured? Here, as in the contingent-valuation context, the "fear state" being measured might be just an experiential state, or an experiential state plus its causal and constitutive consequences; and the optimal emotional condition for the respondent, be it calm or fearful, is the condition implied by the idealized perspective that defines objective welfare goods. What needs further discussion is the nature of the QALY scale.

Scholarship on QALYs sometimes conceptualizes the QALY scale as a health scale, not a welfare scale. 183 On this view, the numbers assigned to states track their goodness *qua* health, not *qua* wellbeing. Value is a generic concept, subsuming both welfare-value and nonwelfarist values (for example, aesthetic value). 184 Perhaps one of the nonwelfarist values there subsumed is health-value. If so, a nonwelfarist QALY scale is a meaningful scale; but, even so, measurements on *this* kind of scale cannot serve as inputs into a welfarist policy-analytic tool such as CBA.

A more subtle problem in using QALY measures to derive WTP/WTA arises when the QALY scale is understood as a welfare scale, but the range of the scale is truncated. To see this problem, consider the Health Utilities Index ("HUI")—one of the leading "health classification" methodologies used by QALY scholars. These methodologies characterize health states in a systematic way, by reducing them to packages of attributes; the packages of attributes are then placed by respondents on the 0–1 QALY scale, with 0 measuring death and 1 the best package. In the case of the HUI system,

<sup>183.</sup> See Dolan, supra note 176, at 1727–29 (contrasting "welfarist" and "extrawelfarist" conceptions of QALYs).

<sup>184.</sup> See L. W. Sumner, Welfare, Happiness, and Ethics 20-25 (1996).

<sup>185.</sup> See Bell et al., supra note 177, at 291 (finding that the Rosser Index, Quality of Well-Being scale, and Health Utilities Index are the most frequently used health state classification systems in QALY research); David H. Feeny et al., Health Utilities Index, in QUALITY OF LIFE AND PHARMACOECONOMICS IN CLINICAL TRIALS, supra note 175, at 239 (describing HUI system).

<sup>186.</sup> See, e.g., Dolan, supra note 176, at 1731–32, 1744–45 (discussing these classification systems); QUALITY OF LIFE AND PHARMACOECONOMICS IN CLINICAL TRIALS, supra note 175, at 161–362 (describing specific systems in detail).

CHICAGO-KENT LAW REVIEW

[Vol 79:977

1046

there are seven attributes: sensation, mobility, emotion, cognition, self-care, pain, and fertility. Each of the seven attributes has four or five levels. For examples, the "sensation" attribute divides into the following four levels:

**HUI Health Status Classification System** 

Attribute	Level	Description
Sensation	1	Able to see, hear and speak normally for age
	2	Requires equipment to see or hear or speak
	3	Sees, hears, or speaks with limitations even
		with equipment
	4	Blind, deaf or mute

Similarly, the "emotion" attribute divides into the following five levels:

Attribute	Level	Description
Emotion	1	Generally happy and free from worry
	2	Occasionally fretful, angry, irritable, anxious,
		depressed, or suffering night terrors
	3	Often fretful, angry, irritable, anxious, etc.
	4	Almost always fretful, angry, irritable, anxious,
		depressed
	5	Extremely fretful, angry, irritable, or de-
		pressed usually requiring hospitalization or
		psychiatric institutional care

The very best state in the HUI system is a state where the subject is at the best level with respect to all seven attributes. He is able to see, hear, and speak normally for his age (sensation); able to walk, bend, lift, jump and run normally for his age (mobility); generally happy and free from worry (emotion); learns and remembers schoolwork normally for his age (cognition); eats, bathes, dresses, and uses the toilet normally for his age (self-care); is free of pain and discomfort (pain); and is able to have children with a fertile spouse (fertility).

The HUI system seems to be a promising tool for measuring anxiety on a QALY scale and thereby indirectly deriving WTP/WTA

<sup>187.</sup> See Feeny et al., supra note 185, at 240–43. The system I am describing here is the HUI Mark II system, which explicitly employs anxiety to differentiate levels within the "emotion" attribute, by contrast with the more recent HUI Mark III system, which does not. See id.

for anxiety. Emotion is one of the system's seven attributes; and the levels within this attribute focus (inter alia) on anxiety. The problem is that the seven attributes of the HUI system collectively comprise only some of the dimensions of objective welfare: the physical and emotional dimensions, not the social, intellectual, practical-reason, political, or recreational dimensions described by Nussbaum in her full list of human goods. 188 This means that the very best state—the state given a QALY value of 1-need not be the very best state for human well-being. A 0-1 move on the QALY scale (as per the HUIsystem) means a move from death to a state where the subject has the very best physical and emotional attributes, plus some package of social, intellectual, practical-reason, political, and recreational characteristics that may be far from perfect. Relatedly, how a given move on the OALY scale (as per the HUI-system) translates into a true interpersonal utility measure, or a dollar measure that roughly approximates a true interpersonal utility measure, will vary tremendously depending on what background set of non-health and non-emotional characteristics are ascribed to the subject.

Imagine, at one extreme, a subject who has no friends, no recreations, no community involvement, no intellectual engagements, and no ongoing goals. Imagine, at the other extreme, a subject who has an active social, professional, and intellectual life. Consider, now, respondents who are asked to attach a QALY value to fear using the HUI classification system. At one extreme, respondents might imagine the first subject, assign 1 to his state when he is perfectly healthy and (somehow) happy, 0 to his death, and place his fear on a 0-1 scale. At another extreme, respondents might imagine the second subject, assign 1 to her state when she is perfectly healthy and happy, 0 to her death, and place her fear state on a 0-1 scale. Quite plausibly, respondents might assign a much higher QALY cost to fear for the first subject than for the second-not because fear has a greater interpersonal welfare impact in the first case, but rather because the first subject's life is so impoverished that experiential or hedonic qualities are (proportionally) more important in it.189

<sup>188.</sup> As the creators of the HUI system explain: "[This system] adopt[s] a relatively more narrow 'within the skin' approach to health status that focuses on physical and emotional dimensions of health status and excludes social interaction because it takes place 'outside the skin." Feeny et al., *supra* note 185, at 240.

<sup>189.</sup> The problem does not disappear if 0 is assigned to the worst physical and emotional state (the state where the subject is at the lowest level with respect to all seven HUI attributes) rather than to death, since the welfare goodness of a given package of emotional and physical

1048

The issue here, it should be stressed, is not whether the state being measured on a QALY scale is fear itself, or fear packaged with changes along the nonemotional dimensions of welfare. We can come up with a OALY cost for being afraid, as opposed to being calm, holding everything else constant. We can also come up with a QALY cost for being afraid plus suffering losses with respect to the nonemotional dimensions of welfare, as compared to being calm and not suffering those losses. Which kind of measurement, translated into dollars, is best for CBA depends on standardization and deliberationcost considerations that I have already discussed. My criticism of the HUI variant of the QALY scale, and similarly truncated variants. concerns not what these scales are used to measure, but how they are calibrated. The scales should be calibrated, as far as possible, to match an interpersonal welfare scale. Equal units assigned to different subjects should represent, as far as possible, equal changes with respect to overall well-being.

All the major health classification systems currently used to generate QALYs suffer from the same defects as the HUI system. 190 QALY measures of anxiety generated using these systems, or otherwise derived from a truncated scale whose intervals are calibrated by varying some (not all) of the dimensions of welfare, are suspect for CBA purposes. To give one prominent example: Kaplan and coworkers, based on a large general population survey, ascribe a QALY loss of -0.257 to "[e]xcessive worry or anxiety." In other words, a day in which the subject is calm and perfectly healthy has a QALY value of 1; a day in which he suffers "excessive worry or anxiety," but is otherwise perfectly healthy, has a QALY value of 0.743. This implies a dollar value for a fear-day that, intuitively, is high. George Tolley, in his comprehensive, "state-of-the-art" estimates of WTP/WTA for health conditions, used low, medium, and high estimates of \$70,000, \$120,000, and \$175,000 per life year to convert some of Kaplan's QALY numbers (not for anxiety but for other morbidities) into

attributes, as compared to the 0 and 1 states, will still depend upon the background professional, intellectual, social, and other characteristics of the subject.

<sup>190.</sup> See MCCULLOCH, supra note 176, at 26–31 (describing the Rosser-Kind system); Kind, supra note 175, at 191–201 (describing the EuroQoL system); Harri Sintonen, The 15D Instrument of Health-Related Quality of Life: Properties and Applications, 33 ANNALS MED. 328 (2001). The HUI system has already been described, and the Quality of Well-Being system is described below.

<sup>191.</sup> Robert M. Kaplan & John P. Anderson, *The General Health Policy Model: An Integrated Approach*, in QUALITY OF LIFE AND PHARMACOECONOMICS IN CLINICAL TRIALS, supra note 175, at 309, 316.

2004] FEAR ASSESSMENT 1049

WTP/WTA. 192 These conversion factors, applied to a QALY value for anxiety of 0.743, imply a cost per fear-day (subsuming only the intrinsic cost of fear) ranging from \$49 to \$123. The FDA's conversion factor of \$373,000 implies a cost per fear-day of \$262. Compare these estimates with the generally lower WTP/WTA estimates for light morbidity conditions that have been directly elicited using contingent valuation.

#### WTP To Avoid a Single Day of "Light" Health Conditions 193

Angina	131
Angina (mild)	88
Angina (severe)	165
Cannot breathe deeply	19
Chest tightness	26
Cough	25
Cough/Sneeze (mild)	12
Cough/Sneeze (severe)	33
Drowsiness	43
Eye irritation	29
Head congestion (mild)	20
Head congestion (severe)	47
Headache	25
Nausea	69
Pain on deep inspiration	35
Runny nose	13
Shortness of breath	9
Shortness of breath (mild)	35
Shortness of breath (severe)	70
Sinus congestion	33
Throat congestion	31

<sup>192.</sup> See Tolley et al., supra note 67, at 329–36.

<sup>193.</sup> These are taken from Johnson, *supra* note 67, at 650–51. The values here are based on contingent-valuation surveys asking for WTP to avoid a single day of the condition. Johnson also reports WTP responses to avoid multiple days of various conditions. The one-day estimates derived from *these* valuations are not included here. (They are generally lower than the directly elicited one-day values.) Where Johnson reports more than one study of a given condition, I have averaged the WTP values.

1050

Kaplan's QALY estimate of anxiety is problematic for CBA purposes because it was derived using his truncated "Quality of Well-Being" scale. 194 Health states were classified with respect to the subject's mobility, physical ability, ability to engage in social activity, and negative experiences (pain, fatigue, cognitive difficulties, anxiety). Respondents were asked to measure the desirability<sup>195</sup> of different concatenations of these attributes on a 0-1 scale, with 0 meaning death and 1 a "perfect" state in which the subject is fully mobile, capable of engaging in the full range of ordinary physical and social activities, and free of any of the hedonic detriments of disease. One important question about Kaplan's survey is whether respondents understood that they were supposed to evaluate the welfare importance of these states rather than its "healthiness" in some nonwelfarist sense. Even if they did understand that, they might have been confused by the evaluative task: What does it mean to assess the welfare-desirability of a state whose welfare-relevant features have been incompletely described? The only way to do that coherently (as already suggested) is to fill in the description by ascribing background nonhealth characteristics, or lotteries over such characteristics, to the subject. 196 If that is what respondents to the Kaplan survey did, what was the source of those background characteristics? Were respondents to Kaplan's survey imagining, as the top point on the 0-1 scale, a mobile, physically and socially capable, and pain and anxiety-free subject who had their (the respondents') affiliational, recreational, professional, intellectual, and income characteristics? A subject with

<sup>194.</sup> See Kaplan & Anderson, supra note 191; see also Robert M. Kaplan et al., Health Status: Types of Validity and the Index of Well-Being, 11 HEALTH SERVICES RES. 478 (1976); Robert M. Kaplan & James W. Bush, Health-Related Quality of Life Measurement for Evaluation Research and Policy Analysis, 1 HEALTH PSYCH. 61 (1982); Robert M. Kaplan & John P. Anderson, A General Health Policy Model: Update and Applications, 23 HEALTH SERVICES RES. 203 (1988).

<sup>195.</sup> I have not located the questionnaire that Kaplan employed in his research. In a recent article on the Quality of Well-Being system, he characterizes the survey as asking respondents to evaluate the "desirability" of health conditions. Kaplan & Anderson, *supra* note 191, at 316.

<sup>196.</sup> If the effect of health on a subject's welfare were (somehow!) independent of the subject's nonhealth characteristics, then a respondent to Kaplan's survey could coherently answer it without ascribing nonhealth characteristics to the subject. Imagine that the welfare measure of a subject's overall state can be decomposed into  $f_1(D_1) + f_2(D_2) + \ldots + f_n(D_n)$ , where the values for the different dimensions range from 0 to 1, and where health is one of these independent dimensions. Then the number on a 0-1 scale assigned to a given health state could represent its value on the health dimension, which does not depend on where the subject is located with respect to the other D. But of course health is not independent of nonhealth characteristics in this sense. If the subject is dead, or incapacitated, or in crippling pain, that limits his possible professional, intellectual, social, and other non-health attainments, or at the very least changes their welfare-significance for him.

ideal such characteristics? A subject with average such characteristics? Even if we were sure that respondents to the Kaplan survey were engaged in welfarist rather than extrawelfarist valuation, and did so in a coherent way, a conversion factor for deriving monetary amounts from their expressed QALY measures would need (somehow) to take account of the problem of background characteristics. A QALY estimate of -0.257 for anxiety, valued on a scale where death is 0 and 1 is good health but a pretty poor life overall, should hardly be converted into dollar inputs to CBA at the very same rate as a QALY estimate of -0.257 on a scale where death is 0 and 1 represents a terrifically high level of welfare.

The solution to these difficulties, I suggest, is to measure fear/anxiety (and health states more generally) on an inclusive QALY scale-one that takes account of a wider range of life's goods, and therefore better approximates a true interpersonal welfare scale. Were there deliberation-cost disadvantages to using an inclusive scale, a truncated scale might on balance be justified - but it is hard to see what the deliberation-cost disadvantages would be. Truncated scales already involve interview costs and necessitate much conceptual effort on the part of respondents. As it turns out, the World Health Organization is currently developing an inclusive "quality of life" index that might be employed to ground QALY ascriptions. 197 The current version of this index, known as the WHOOOL-100, employs twenty-four attributes ("facets"), grouped into six domainsphysical, psychological, "independence," social, environmental, and spiritual-to characterize subjects' states. The first three domains cover the territory of existing health classification systems, but also include a self-esteem attribute, a body-image attribute, and an attribute for positive as well as negative feelings. The last three domains cover much of what is subsumed by Nussbaum's list of objective goods but excluded by traditional QALY indices. The "social" domain asks about the quality of the subject's personal relationships, social support, and sex life. The "environment" domain covers

<sup>197.</sup> See Amy E. Bonomi et al., Validation of the United States' Version of the World Health Organization Quality of Life (WHOQOL) Instrument, 53 J. CLINICAL EPIDEMIOLOGY 1 (2000); Silvija Szabo, The World Health Organization Quality of Life (WHOQOL) Assessment Instrument, in QUALITY OF LIFE AND PHARMACOECONOMICS IN CLINICAL TRIALS, supra note 175, at 355; The WHOQOL Group, The World Health Organization Quality of Life Assessment (WHOQOL): Development and General Psychometric Properties, 46 Soc. Sci. Med. 1569 (1998); The WHOQOL Group. The World Health Organization Quality of Life Assessment (WHOQOL): Position Paper from the World Health Organization, 41 Soc. Sci. Med. 1403 (1995).

#### CHICAGO-KENT LAW REVIEW

1052

personal security, housing quality, wealth, access to information and education, access to social services, recreational activities, pollution, and transport. The spiritual domain asks about the perceived meaningfulness of the subject's life.

A QALY estimate of fear or anxiety derived from a large-scale survey of calm (not fearful) individuals using an inclusive health-state classification system such as the WHOQOL-100 would be an excellent basis for a monetary valuation of these mental states. Alas, I have found no such estimate in the published literature.

#### **CONCLUSION**

Fear is a welfare setback and thus, it would seem, should be counted as a cost for CBA purposes. In this Article, I have argued that agencies should indeed engage in fear assessment; they should quantify and monetize the effects of their choices on overall fear and anxiety, where agencies are otherwise engaged in CBA and where ex ante the deliberation costs of fear assessment appear to be warranted. The Article has rebutted various objections to fear assessment, other than the deliberation-cost worry: irrational as well as rational fears are real harms for those who experience them; fear can be quantified; worries about uncertainty and causality reduce to deliberation costs; the possibility of reducing fear through information rather than prescription means that agencies should look at a wider range of policy options, not that they should evaluate options without considering fear costs; the concern that the very practice of fear assessment will, on balance, increase fear by creating stronger incentives for fear entrepreneurs seems overblown; and fear is a welfare setback, whether or not it flows from political views. Further, I have argued that fear assessment should take an "unbundled" rather than "bundled" form, at least if the current VOSL method for pricing risk is retained; the notion of incorporating both fear and risk costs in "tailored" VOSLs rests on two implausible assumptions, namely a coincidence between actual and perceived risk and a linear correlation between perceived risk and fear. I have proposed one concrete methodology for "unbundled" fear assessment: predicting changes in aggregate fear-days resulting from regulatory interventions, and pricing each fear-day at a standard price. Finally, I have tried to show that contingent-valuation rather than revealed-preference techniques are best suited to reveal the cost-in my lingo, the "welfare equivalent"-for a fear state; that the instrumental as well as intrinsic costs of fear may need to be

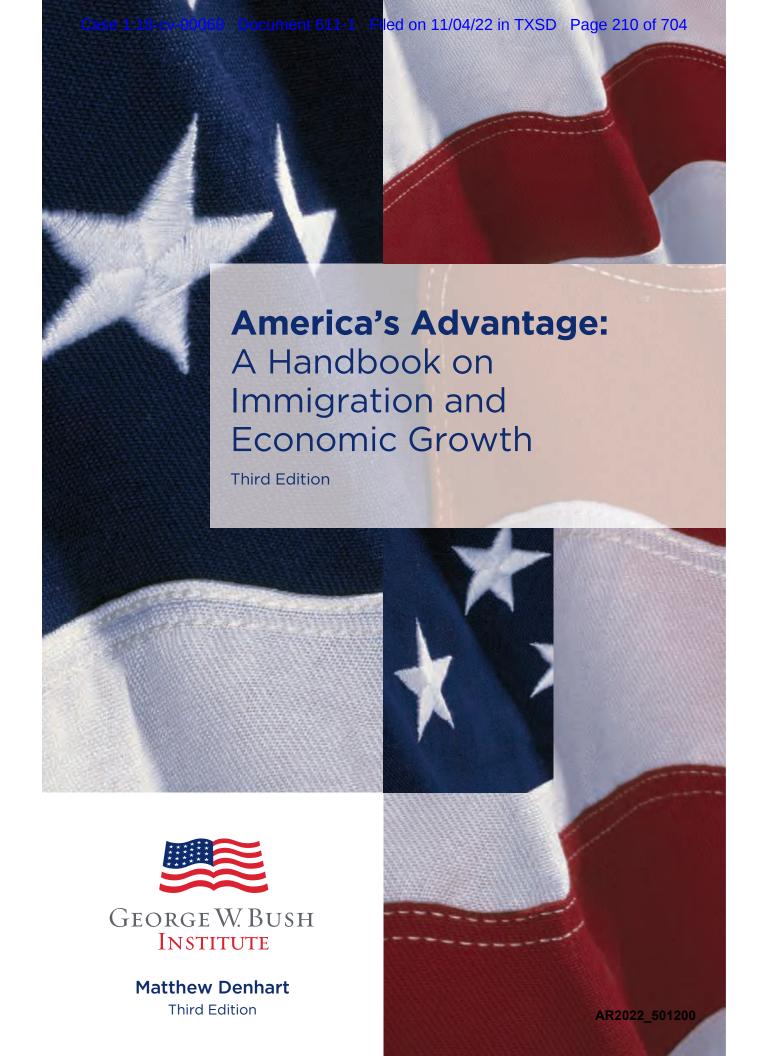
[Vol 79:977

2004| FEAR ASSESSMENT 1053

accounted for; that, optimally, the respondents to contingent-valuation interviews are calm, not fearful; and that QALY measures of fear may be a useful way to generate estimates of welfare equivalents, but only if the QALY scale is understood as a welfare scale and is calibrated in an inclusive way.

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ase 1:18-cv-00068 Document 611-1 Filed on 11/04/22 in TXSD Page 209 of 7







## America's Advantage: A Handbook on Immigration and Economic Growth

Third Edition

**Matthew Denhart** 





	Table of Contents
	Introduction10
Chapter 1:	Immigrants in America — Yesterday, Today, and Tomorrow15
Chapter 2:	Immigrants and Economic Growth Immigrants Are a Strong Workforce
Chapter 3:	The Challenges of Immigration102
Chapter 4:	Achieving the American Dream144
Chapter 5:	Public Policy Considerations162
Chapter 6:	Higher U.S. Economic Growth through Immigration184
Chapter 7:	Immigration and Canada198
Chapter 8:	Immigration and Mexico 218
Chapter 9:	Conclusion239
	Bibliography241





# Immigrants drive economic growth and job creation.

### Foreword by Kenneth A. Hersh

The United States is what it is today because of immigrants. Immigration is our past and our present. Economic growth is a function of productivity growth multiplied by population growth and workforce participation. With productivity growth stagnating today and an aging population, a responsible immigration policy is imperative if we are to enjoy the economic growth we deserve.

The U.S. has not passed major immigration reform legislation since the Reagan administration, and we still use standards developed in the 1960s to determine which people we permit to enter the U.S. A system this outdated cannot possibly meet the needs of our vibrant, growing 21st-century economy.

At the George W. Bush Institute, we believe immigration policy should be used as a tool for economic growth and prosperity.

In this third edition of *America's Advantage: A Handbook on Immigration and Economic Growth*, we strive to refocus the debate on the facts and promote pro-growth reform. We are pleased to partner with The Latino Coalition and the U.S. Hispanic Chamber of Commerce in this effort.

Immigrants drive economic growth and job creation. More than 40 percent of Fortune 500 businesses were started by an immigrant or second-generation American. More importantly, the country needs the entrepreneurial spirit of immigrants, who start new businesses at twice the rate of native-born Americans. This has been evident since our country was founded.

Nearly half of our labor force growth over the past 10 years was due to immigration. Immigrants are overwhelmingly in the prime working-age years, unlike the native born, who are rapidly aging. Americans have fewer children than we need to replace our current population. Immigrants can fill that void, helping us avoid the shrinking economy that accompanies a shrinking population.

New to this edition are chapters on immigration in Canada and Mexico, our neighbors and close allies. From these chapters we can learn how Canada's immigrant population, chosen overwhelmingly by a merit-based system, looks compared to our system, which is based on family reunification. The Mexico chapter demonstrates the important role that immigration plays in the U.S.-Mexico relationship, particularly highlighting how Mexico's own security efforts complement U.S. border security efforts.

A workable, pro-growth immigration policy is long overdue. Immigration reform will not be easy, but we hope that this handbook will provide some clarity and focus to the debate.

— Kenneth A. Hersh President and Chief Executive Officer George W. Bush Presidential Center Immigrants have made indispensable contributions to our American economy for centuries.

#### **Foreword by Javier Palomarez**

Today, immigration stands as one of the most emotional topics in our national conversation. However, regardless of where you stand on the political spectrum, one fact is indisputable: immigrants have made indispensable contributions to our American economy for centuries. This handbook is critical to dispelling the rhetoric and examining the data which inform our path forward on sensible, economically grounded immigration reform.

The real challenge in the immigration dialogue is ensuring that America's growth strategy accounts for the changing needs of the market and the global talent pool. The U.S. has remained the world's strongest economy in large part because it has been able to attract diverse people and reap the benefits of their talents and hard work. This inflow of human capital is key to the renewal of the American dream.

Our current immigration system, unfortunately, is poorly adapted to the modern needs of American business. While the free market requires a variety of skill sets to fill critical jobs, the inability of policy makers to address immigration reform has hindered economic growth. Innovation is stifled when scientists and engineers with a desire to create are turned away upon completing their advanced studies. Jobs and revenues are lost when entrepreneurs with good ideas cannot start or grow a business. We cannot take for granted the contributions of blue-collar workers who keep our farms, restaurants, hotels, and homes in working order.

The United States Hispanic Chamber of Commerce, the nation's largest Hispanic business organization, is proud of its long-standing partnership with the George W. Bush Institute and is delighted to collaborate on the newest edition of this extraordinary publication. In a broad examination of our economy, this study incorporates analyses of entrepreneurship, educational attainment, employment, earnings, and many other critical components into a detailed and comprehensive report. With this new edition of the immigration handbook, the Bush Institute illustrates the economic imperative of pro-growth immigration policy reform more clearly than ever. The analysis shows that reforming our immigration system in a common-sense and business-friendly way is vital for achieving strong and lasting economic prosperity.

In a globally competitive environment, the United States must continue to ensure that those with ideas, initiative, and a strong work ethic have the ability to come to our country — a country built on a foundation of the tired, the poor, and the huddled masses yearning to be free — to build a better life for themselves and for all Americans.

— Javier Palomarez

President & CEO

United States Hispanic Chamber of Commerce

The strategic importance of a just and constructive immigration system is more critical than ever.

#### **Foreword by Hector Barreto**

As our great nation continues to expand and change, few issues of public policy get easier. Immigration is certainly no exception to this rule — in fact, the level of difficulty in addressing challenges within our immigration system has been disproportionately exacerbated by politics, misunderstanding, and complacence.

The strategic importance of a just and constructive immigration system is more critical than ever — from both an economic and a national security standpoint. Because this issue is so charged, it is imperative to understand the facts surrounding it. By starting here, we can eventually coalesce around policies that will benefit our country's needs first, now and in the future.

My perspective on this issue is personal. I am close to, and proud of, my immigrant roots. When my father moved to this country from Mexico in the 1950s, he came for the same reason people from around the world have always come to America: to build a better life for themselves, for their families, and for this country.

And build a better life he did — upon the unique foundation of freedom, opportunity, and personal responsibility.

My father's first jobs were agricultural and janitorial. But his American dream was business ownership. He was single-minded about becoming his own boss. With the help of my mother, and eventually that of my sisters and myself, a family restaurant business was built, then importing and construction businesses. My father became not only a successful businessman who created many jobs, but a leader in his community, spearheading the establishment of the Kansas City, Missouri Chamber of Commerce and then the U.S. Hispanic Chamber of Commerce. By the time he was in his 40s, he was a proud advisor to a U.S. president: Ronald Reagan.

My father said it then, and it is still true today: "This could only happen in one country: America."

My father's success is America's success — and this is true for millions of immigrant stories. It is something exceptional that is to be preserved and carried on for the good of our nation.

I'm proud to have served in the last presidential administration to tackle immigration reform in a serious and thoughtful way. But the sobering fact is that this issue hasn't gotten easier, and we often feel further away from solutions than ever before. This handbook should serve as a guide to the development of sound policies that ensure the opportunities of my father will be available to new American immigrants for generations to come.

— The Honorable Hector Barreto Chairman, The Latino Coalition 41st Administrator of the U.S. Small Business Administration

## Introduction

#### **America's Advantage**

For hundreds of years, people from all corners of the globe have left their homelands to come to the United States. For many, America has appealed as a land of economic opportunity, a place where anyone, from any background, can come to work for a better life. In the process of bettering their own lives, immigrants have contributed immeasurably to America.

From America's earliest days, immigrants have played a leading role in building what has become the most prosperous nation in the history of the world. Indeed, eight of the 56 signers of the Declaration of Independence were foreign-born, as were four of the first six secretaries of the U.S. Treasury, beginning with Alexander Hamilton, who was born in the Caribbean.

Some of the most well-known American innovators from history were immigrants. Alexander Graham Bell, Joseph Pulitzer, Nikola Tesla, and Albert Einstein are but a few examples. And immigrants have continued to make valuable contributions to America and its economy. Elon Musk, Sergey Brin, Arianna Huffington, Andy Grove, and Jerry Yang are few more recent entrepreneurs who immigrated to the U.S.

The American debate over immigration predates even the country itself. Among the grievances enumerated in the Declaration of Independence is the charge that King George III had "endeavoured to prevent the population of these states." Today, issues of border security and unauthorized immigration dominate headlines. These are important issues, and require careful consideration, but all too often they overshadow other critical aspects of the immigration discussion.

One especially important factor is the role immigrants play in the economy. Despite the rhetoric, on this point the evidence could not be clearer: immigrants are a powerful and positive force in the U.S. economy. This book seeks to tell that story — presenting the economic evidence about immigration that is too often overlooked.

Chapter 1 examines how immigration in the U.S. has changed throughout history, and how historic trends continue to shift today. This chapter also offers readers a glimpse of what immigration will look like in the decades to come. Chapter 2 makes the case that immigrants are strong contributors to the U.S. economy by providing data and evidence demonstrating that

immigrants play an outsized role in America's labor force and help drive future growth through innovation and entrepreneurship.

Of course, immigration does present challenges. Unauthorized immigration fuels passions like few other policy issues today. Other aspects of immigration concern Americans as well: Do immigrants compete with natives for jobs and lower their wages? Do immigrants impose fiscal burdens that our country may be unable or unwilling to handle? Are recent waves of

#### Immigrants are a powerful and positive force in the U.S. economy.

immigrants learning English and sufficiently assimilating into society? Many have

researched and analyzed these issues, helping to dispel myths while making clearer the areas where immigration does indeed present challenges. A fuller discussion of these issues and the associated research is found in Chapter 3.

Chapter 4examines the data related to the U.S.-born children of immigrants. The success these "secondgeneration Americans" achieve is nothing short of remarkable. On many indicators, the children of immigrants perform better than not just their parents, but native-born Americans as well.

It is important to consider the barriers that current U.S. immigration laws represent. Designing an entirely new immigration system is well beyond the scope of this book. But Chapter 5 does outline some key areas where reform could strengthen immigrants' contributions to America's economy. If America's immigration laws were improved, economic growth would accelerate. This evidence is presented in Chapter 6.

New to this edition are two chapters on immigration in Canada and Mexico. These two countries are America's neighbors and closest allies. Chapters 7 and 8 explore how each country deals with this sometimes contentious policy issue. What can the U.S. learn from the experiences of its neighbors? How does America's immigration policy impact Canada and Mexico, and vice versa? Most importantly, what opportunities exist for the countries of North America

to work together constructively on immigration? Answering all these questions is a subject for further research, but these chapters provide the basic data to guide such analyses.

Communicating the positive economic contributions of immigrants is the essential first step to helping Americans recognize the hidden advantages of immigration as well as the need for policy reform. This book is dedicated to that end. It brings the story of the economic contributions of immigrants to life by supplying data and evidence. Equipped with the facts, and a deeper understanding of the many ways immigrants contribute to the economy, Americans will see that America's greatest advantage lies in its people — both native and foreign-born.

— Matthew Denhart September 2017

#### A Note on Terminology

Throughout this book the terms "immigrant" and "foreign-born" are used interchangeably to refer to those people currently living in the United States of America who were born in another country. At times these people are also referred to as "first-generation Americans."

Throughout the book, the phrase "second-generation American" is used to refer to the immediate children of immigrants to America.

Much of the data presented in this book comes from the U.S. Census Bureau's annual American Community Survey (ACS). The ACS classifies the following groups as "foreign-born": naturalized U.S. citizens, lawful permanent residents, temporary migrants, humanitarian migrants, and unauthorized migrants.

The term "naturalized U.S. citizens" refers to those people born outside the U.S. who legally came to the U.S. and successfully completed the process established by the U.S. federal government to become U.S. citizens. "Lawful permanent residents" (also known as green card holders") are those people born outside the U.S. who have obtained the legal permission of the U.S. federal government to live in the U.S. on a permanent basis. These people are eligible to pursue the naturalization process to become U.S. citizens, but are not required to do so. "Temporary migrants" are those people born outside the U.S. who are residing in the U.S. on a temporary basis. Examples include those granted temporary work visas as well as foreign students studying in the U.S. The term "humanitarian migrant" refers to international refugees living in the U.S.

The term "unauthorized migrant," used interchangeably with the term "unauthorized immigrant," refers to those people born outside the U.S. whose presence in the U.S. violates established U.S. laws. Examples of unauthorized migrants include those people who enter the U.S. without the permission of the U.S. federal government, those people who remain in the U.S. after their approved term of entry has expired, and those people who violate the conditions of their entry into the U.S., such as being employed without the proper authorization from the U.S. government.

#### America welcomes immigrants.

Significant Fact: Almost one out of every four people in the U.S. is an immigrant or the child of an immigrant.

America is truly a nation of immigrants. Nearly all people living here today are immigrants themselves, or are the descendants of immigrants who came to this country earlier in its history.

The U.S. Census Bureau estimates that in 2015, the U.S. welcomed a new immigrant, on net, every 28 seconds.<sup>1</sup> Overall in 2015, 43.3 million immigrants lived in the U.S., accounting for 13.5 percent of all U.S. residents.<sup>2</sup> In other words, in 2015 more than one in every eight persons in the U.S. was a first-generation immigrant.

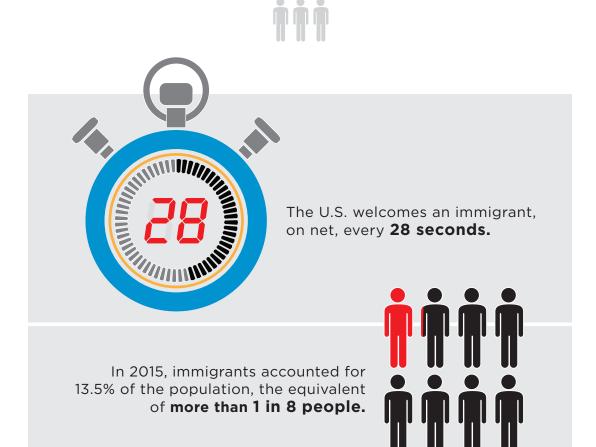
When one considers the children of immigrants, the foreign-born presence in the U.S. is even more substantial. In 2015, some 38.5 million "second-generation immigrants"<sup>3</sup> lived in the country. Together, the first and second generations of immigrants accounted for over 83 million of America's total population. That equals more than 25 percent of America's total population, i.e., the equivalent of one out of every four people in the U.S.4

<sup>1</sup> U.S. Census Bureau, International Data Base, 2015.

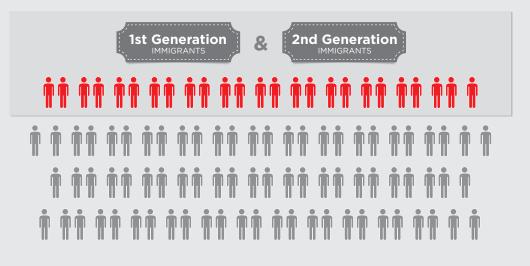
<sup>2</sup> U.S. Census Bureau, 2015 American Community Survey.

<sup>3</sup> A "second-generation immigrant" refers to an individual who reports having at least one foreign-born parent.

<sup>4</sup> Modern Immigration Wave Brings 59 Million to U.S., Driving Population Growth and Change Through 2065: Views of Immigration's Impact on U.S. Society Mixed. Washington, D.C.: Pew Research Center, 2015.



First- and second-generation immigrants made up 25% of the U.S. population in 2015, or **1 out of every 4 people.** 



Source: U.S. Census Bureau.

#### Immigration to the U.S. has quadrupled during the past four decades.

**Significant Fact: Immigrants** account for 13.5% of the total U.S. population, up from only 4.7% in 1970.

Today the U.S. has more immigrants in its population than at any other time in history. Compared to 1990, immigration has doubled in the U.S., with 43.3 million immigrants accounted for in 2015. That number is quadruple the number of immigrants in the country in 1970 and 19 times larger than the 2.24 million immigrants in America in 1850.<sup>5</sup>

Of course the U.S. population as a whole has grown dramatically since 1850. Thus, it is important to examine the immigrant population as a share of the entire U.S. population. In 1850, immigrants represented less than 10 percent of the U.S. population. But for the next seven decades, during many of which the growth rate of the immigrant population outpaced that of natives, immigrants accounted for around 13 percent to 14 percent of the overall population. At the peak in 1910, immigrants accounted for 14.7 percent of the population. But during the 1920s, the immigrant share of the population began to fall, and it would continue to decline for much of the next 50 years — such that by 1970 immigrants represented only 4.7 percent of the U.S. population. The trend reversed in the 1970s. After a large increase in the size of the immigrant population during the 1990s, by 2000 the immigrant share of the population had returned to above 11 percent.<sup>6</sup> In 2015, as indicated, 13.5 percent of all U.S. residents were immigrants.7

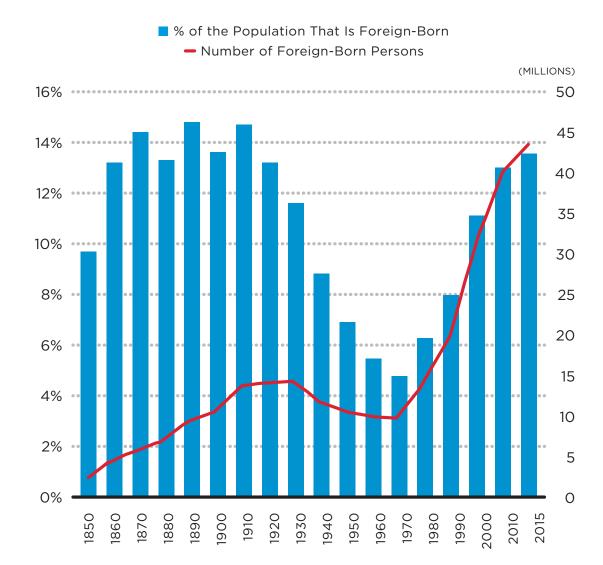
<sup>5</sup> U.S. Census Bureau, Historical Census Statistics on the Foreign-Born Population of the United States: 1850-2000; U.S. Census Bureau, 2015 American Community Survey.

<sup>6</sup> U.S. Census Bureau, Population Division, Nativity of the Population and Place of Birth of the Native Population: 1850 to 1990, by Campbell Gibson and Emily Lennon, October 31, 2011, http://www.census.gov/population/www/ documentation/twps0029/tab01.html.

<sup>7</sup> U.S. Census Bureau, 2015 American Community Survey.



### Number of Foreign-Born Persons and Proportion of the U.S. Population That Is Foreign-Born, 1850-2015



Source: U.S. Census Bureau, *Historical Census Statistics on the Foreign-Born Population of the United States: 1850–2000*; U.S. Census Bureau, 2013 American Community Survey.

#### America is the first choice for immigrants worldwide.

**Significant Fact:** Of all immigrants worldwide, one in five live in the U.S.

Some 244 million people worldwide, or approximately 3.4 percent of the world's population, live in a country that is not where they were born.8 This makes them "international migrants," more commonly known as "immigrants."

The most common destination of these immigrants is, by far, the United States. In 1990, approximately 15.2 percent of all immigrants worldwide lived in the U.S. By 2015 this share had grown to 19.1 percent. That's almost four times as many immigrants here in the U.S. compared to Germany, the country with the second highest share of the world's immigrants in 2015. Russia is home to the third highest share of all immigrants worldwide with 4.8 percent, followed by Saudi Arabia with 4.2 percent and the United Kingdom with 3.5 percent.9

America has a large total population compared to most other countries in the world. Even so, in 2015 only around one in 23 people worldwide lived in the U.S.<sup>10</sup> Meanwhile, the same was true of almost one in five worldwide immigrants. That is a telling ratio. Furthermore, there is no reason to believe that a large overall population size necessarily makes a country a magnet for immigrants. After all, other largepopulation countries like China and India attract far fewer immigrants than the U.S.

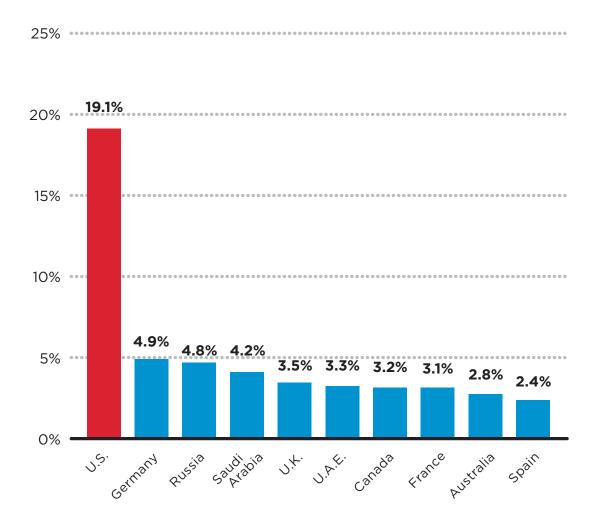
Author's calculations, data from Trends in International Migrant Stock: The 2015 Revision, report (United Nations, Department of Economic and Social

<sup>10</sup> U.S. Census Bureau, International Data Base, 2015



## Share of All International Migrants Worldwide Who Reside in Each Country, 2015

#### (Top 10 Countries Shown in Graph)



Source: United Nations, Trends in International Migrant Stock: The 2015 Revision.

#### Most immigrants in the U.S. come from Latin America and Asia ...

**Significant Fact:** More than half of all immigrants in the U.S. come from Latin America, and **30%** come

from Asia.

Immigrants come to the U.S. from all corners of the globe. But the majority — more than half of all immigrants living in the U.S. in 2015 — were born in Latin America.<sup>11</sup> It is not surprising that Latin American countries contribute such a high share of America's immigrant population, given these countries' close geographic proximity to the U.S.

Asia is the source of the second highest percentage, 30.6 percent, of immigrants in America in 2015. Europe was once the largest source of immigrants to the U.S., but by 2015 only around 11.1 percent of new arrivals were born in a European country. Still, that's more than twice as many immigrants as from the continent of Africa. "Other" regions, which include Northern America and Oceania, 12 account for the final 2.5 percent of immigrants in America.<sup>13</sup>

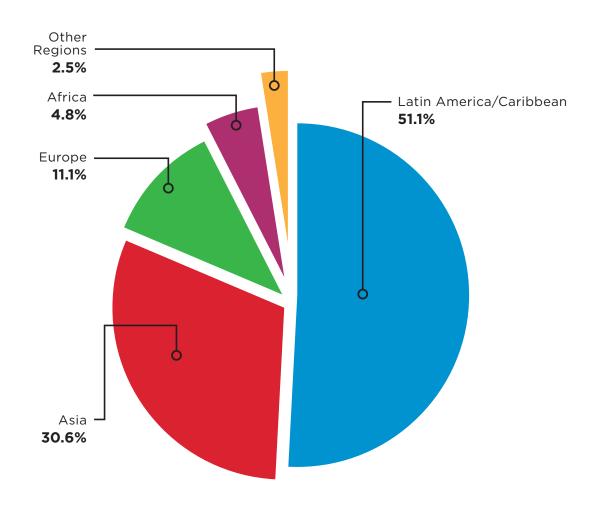
<sup>11</sup> Note: "Latin America" comprises Mexico, Central American countries, South American countries, and Caribbean countries.

<sup>12</sup> Note: "Northern America" comprises Canada, Bermuda, Greenland, Saint Pierre and Miquelon, and the United States. "Oceania" comprises Australia, New Zealand, Melanesia, Micronesia, and Polynesia.

<sup>13</sup> U.S. Census Bureau, 2015 American Community Survey.



## Share of Total U.S. Foreign-Born Population by World Region, 2015



Source: U.S. Census Bureau, 2015 American Community Survey.

## Mexico is the most common country of birth among immigrants in the U.S.

**Significant Fact:** 

More than one in four immigrants in the U.S. were born in Mexico. The U.S.-Mexico border is the largest immigration corridor in the world. <sup>14</sup> In 2015 approximately 11.6 million Mexican-born immigrants lived in the U.S., accounting for nearly 27 percent of all immigrants in the U.S. at the time.15

Mexico had more immigrants in the U.S. in 2015 than the next six countries combined (China, India, Philippines, El Salvador, Vietnam, and Cuba). After Mexico, China<sup>16</sup> and India have the highest shares of U.S. immigrants with approximately 6.2 percent and 5.5 percent, respectively, in 2015.17

Mexico's disproportionate share of all U.S. immigrants has largely occurred over the past half century. In 1960, just over a half million Mexican-born immigrants lived in the U.S. Over the following 20 years this figure nearly quadrupled to 2.2 million in 1980. The number of America's Mexican-born doubled each of the next two decades, so that by 2000, 9.2 million immigrants in the U.S. were born in Mexico.<sup>18</sup>

<sup>14</sup> Migration and Remittances Factbook 2016, Third Edition (Washington, D.C.: World Bank, 2016).

<sup>15</sup> Author's calculations. Data from U.S. Census Bureau, 2015 American Community

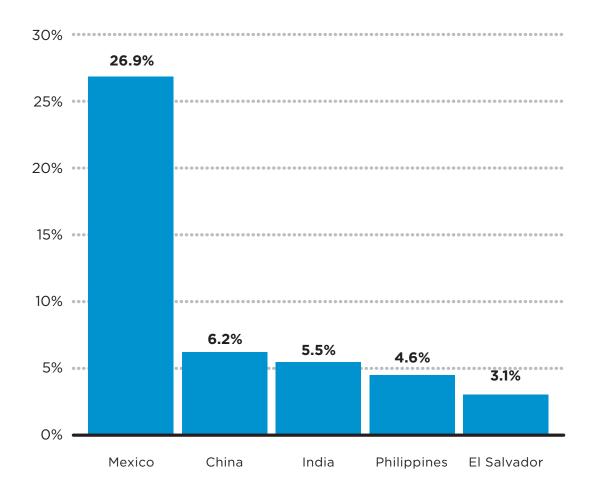
<sup>16</sup> Note: Data for "China" include those born in mainland China, Hong Kong, and

<sup>17</sup> Author's calculations. Data from "Immigration Data Hub," Migration Policy Institute Data Hub, http://www.migrationinformation.org/datahub/.

<sup>18</sup> Ibid.



## Share of Total U.S. Foreign-Born Population from Top Five Countries of Birth, 2015



Source: Author's calculations. Data from "Immigration Data Hub," Migration Policy Institute Data Hub.

Note: Data for "China" include those born in mainland China, Hong Kong, and Taiwan.

### But immigration to the **U.S. from Mexico has slowed** in recent years ...

**Significant Fact:** Between 2010 and 2015, the total number of **Mexican-born** immigrants in the U.S. shrank.

The number of Mexican-born immigrants peaked at 11.7 million in 2007.19 The chart on the previous page showed that in 2015, almost 27 percent of all U.S. immigrants were born in Mexico. Yet, as evident in the first chart on the next page, the Mexican-born share of total immigrants in the U.S. has fallen every year since 2007.

While Mexico's share of immigrants in the U.S. has declined, so too has the rate of growth in the overall size of the Mexican-born population in the U.S. As the second chart on the next page shows, the Mexicanborn population in the U.S. increased almost 8 percent on average each year during the 1990s. The rate of growth slowed considerably beginning in the 2000s. For the period 2000 to 2006, Mexican-born immigrants in the U.S. increased at a steady, but much slower, pace of around 4 percent per year. The slowdown became much more accentuated during the second half of that decade, with the average annual increase between 2006 and 2010 being less than 0.5 percent. Most dramatic of all, the Mexican-born population in the U.S. actually shrank between 2010 and 2015.<sup>20</sup>

Of Mexican immigrants who do currently live in the U.S., only a small portion have come in recent years. In fact, of all Mexican-born immigrants in the U.S. in 2015, only 7.7 percent had arrived in the U.S. since 2010, compared to 15.6 percent of all immigrants.<sup>21</sup>

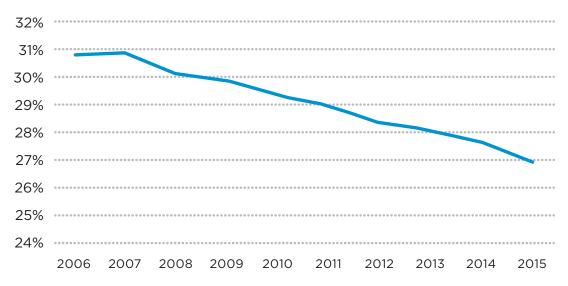
<sup>19</sup> U.S. Census Bureau, 2007 American Community Survey.

<sup>20</sup> Author's calculations. Data from "Immigration Data Hub," Migration Policy Institute Data Hub, http://www.migrationinformation.org/datahub/.

<sup>21</sup> Author's calculations. Data from U.S. Census Bureau, 2015 American Community Survey.

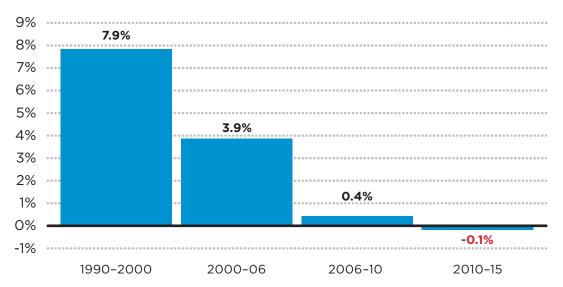


#### Share of the Total Foreign-Born Population That Was Born in Mexico, 2006-15



Source: Author's calculations. Data from U.S. Census Bureau, 2013 American Community Survey.

#### Compound Annual Average Growth Rate of the Mexican-Born Population Living in the U.S., Selected Periods, 1990–2015



Source: Author's Calculations. Data from "Immigration Data Hub," Migration Policy Institute Data Hub.

## ... Meanwhile, immigration to the U.S. from China and India has increased steadily.

**Significant Fact:** In 2013 more immigrants came to the U.S. from China than from Mexico.

According to data from the U.S. Census Bureau, in 2013 immigration from China and India surpassed that from Mexico. In that year, some 147,000 Chineseborn and 129,000 Indian-born immigrants came to the U.S., compared to 125,000 from Mexico.<sup>22</sup> While the difference in the numbers of immigrants from Mexico and India was not statistically significant, it is clear that a dramatic shift is underway with respect to the placeof-birth composition of U.S. immigration.

The sizes of the overall Chinese- and Indian-born populations living in the U.S. have increased steadily over the last two decades. As the chart on the next page shows, in 1990, fewer than 1 million first-generation immigrant Chinese<sup>23</sup> and fewer than half a million firstgeneration immigrant Indians lived in the U.S. By 2015, these numbers had grown to almost 2.7 million Chinese and 2.4 million Indians. For the entire period from 1990 to 2015, the Indian-born population in the U.S. grew at an average annual rate of 6.9 percent while the Chineseborn population grew around 4.4 percent per year.<sup>24</sup>

It's important to note that immigration to the U.S. from China and India — and indeed many other countries — would almost certainly be even larger if U.S. laws were different. As we will see later in this handbook, many countries have lengthy queues of people waiting to enter the U.S. (see pages 174–77).

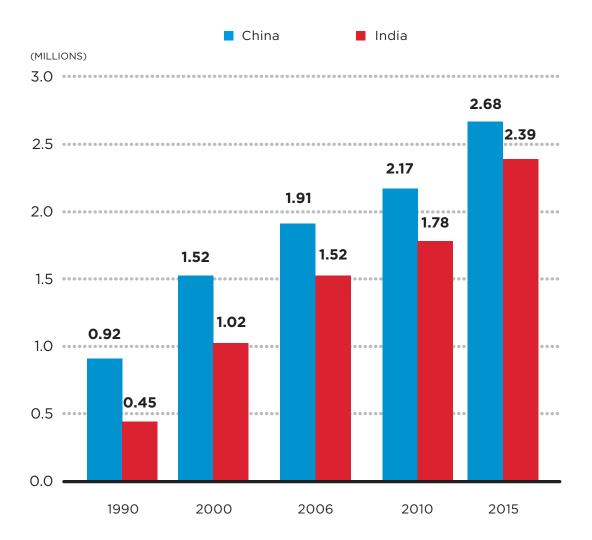
<sup>22</sup> U.S. Census Bureau. Population Division. The Place-of-Birth Composition of Immigrants to the United States: 2000 to 2013. By Eric B. Jensen, et. al.

<sup>23</sup> Data for the Chinese-born include those born in mainland China, Hong Kong, and Taiwan.

<sup>24</sup> Author's calculations. Data from "Immigration Data Hub," Migration Policy Institute Data Hub, http://www.migrationinformation.org/datahub/.



#### Number of Chinese-Born and Indian-Born Living in the U.S., Selected Years, 1990–2015



Source: "Immigration Data Hub," Migration Policy Institute Data Hub.

Note: Data for "China" include those born in mainland China, Hong Kong, and Taiwan.

## The majority of all immigrants to the U.S. live in just four states ...

Significant Fact:

California is home to one-fourth of all immigrants in the U.S.

Where do immigrants live once they arrive in the U.S.? All across the country, of course, but they are concentrated in a handful of states. Approximately one in four immigrants in the U.S. lives in California. In fact, California has more immigrant residents than the 40 states with the smallest immigrant populations combined. Texas is home to the second highest share of immigrants, with 10.8 percent of the U.S. total, followed by New York with 10.5 percent and Florida with 9.4 percent. Together, these four states are home to more than half of the country's immigrant population.<sup>25</sup>

It is true that these four states have large overall populations. However, the immigrant share of each of these states' overall populations is significantly higher than the nationwide average of 13.5 percent. In 2015, 27.3 percent of all California residents were immigrants. Similarly, 22.9 percent of New York residents were born in a different country, and the same was true of 20.2 percent of Floridians and 17.0 percent of Texans.<sup>26</sup>

In five other states, immigrants also represent at least 15 percent of the total state population: New Jersey (22.1 percent), Nevada (19.3 percent), Hawaii (17.7 percent), Massachusetts (16.1 percent), and Maryland (15.2 percent).<sup>27</sup>

<sup>25</sup> Author's calculations. Data from U.S. Census Bureau, 2015 American Community Survey.

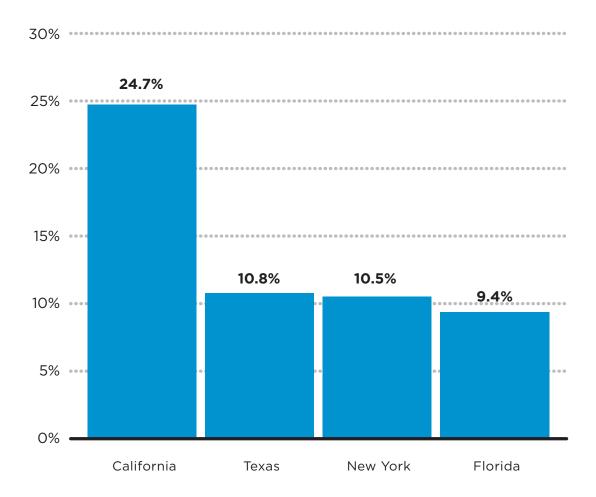
<sup>26</sup> Ibid.

<sup>27</sup> Ibid.



#### Percentage of Total U.S. Foreign-Born Population Residing in Each State, 2015

(Top Four States Shown in Graph)



Source: Author's calculations. Data from U.S. Census Bureau, 2015 American Community Survey.

#### ... But immigrants' presence is growing in other states too.

Significant Fact: In recent years, Southern states have seen the largest percentage growth in the share of state population that is foreign-born.

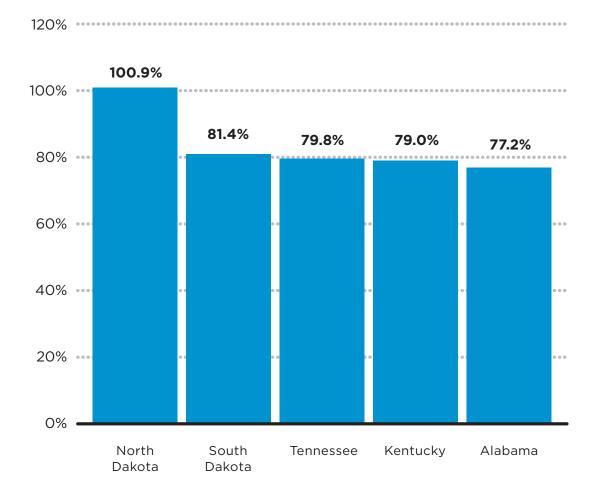
States that many do not consider traditional immigrant states have become more immigrant intensive in recent years. Between 2000 and 2015, the state with the greatest percentage growth in the immigrant share of overall population was North Dakota, where the immigrant share of the population doubled, increasing from 1.9 percent of the state population in 2000 to 3.8 percent in 2015. South Dakota experienced the second greatest increase, with the ratio of immigrants to total residents increasing 81.4 percent over this period. Other states that became noticeably more immigrant intensive over this period were clustered primarily in the South. Tennessee's ratio of immigrants to total residents increased by 79.8 percent, Kentucky's by 79.0 percent, Alabama's by 77.2 percent, Arkansas's by 74.0 percent, and Mississippi's by 72.2 percent.<sup>28</sup>

It is worth noting that states like California already have such large numbers of immigrants that adding more immigrants has a smaller effect compared to other states. Thus, the data above do not necessarily indicate that immigrants are no longer moving to the states with traditionally large immigrant populations. On the contrary, the four states with the largest absolute increase in the number of immigrants between 2000 and 2015 were, in order, California, Texas, Florida, and New York, the same four states with the largest overall immigrant populations.<sup>29</sup>

<sup>28</sup> Author's calculations, data from U.S. Census Bureau, 2015 American Community Survey; "Immigration Data Hub," Migration Policy Institute Data Hub, http://www.migrationinformation.org/datahub/.



### Percentage Growth in the Share of State Population ThatIs Foreign-Born, Top Five States, 2000-15



Source: Author's calculations. Data from U.S. Census Bureau, 2015 American Community Survey and "Immigration Data Hub," Migration Policy Institute Data Hub.

# America's immigrant population will grow dramatically in the future.

**Significant Fact:** 

The Pew
Research Center
projects that
future immigrants
and their U.S.born descendants
will account for
some 88% of
total U.S.
population
growth between
2015 and 2065.

The size of America's immigrant population is expected to continue its strong growth over the next several decades. The Pew Research Center projects that by 2065, some 78 million immigrants will live in the U.S., the equivalent of around 18 percent of America's overall population.<sup>30</sup> This would be an all-time high for the U.S., surpassing the previous high-immigration mark seen in the late 19th century, when almost 15 percent of America's population was immigrants.

The projected growth of the immigrant population in the U.S. is expected to greatly outpace the growth of the native-born population. Between 2015 and 2065, data from the Pew Research Center suggest America's immigrant population will grow nearly 75 percent. Meanwhile, the size of America's native-born population is poised to grow only 30 percent over this same period. These projections suggest immigrants will account for around 30 percent of America's total population growth over the next 50 years despite representing less than one-seventh of the country's total population in 2015.

What's more, including the descendants of future immigrants, i.e., the so-called second- and third-generation immigrants, projections suggest future immigrants and their U.S.-born children and grandchildren will combine to account for some 88 percent of total U.S. population growth over the next 50 years.<sup>31</sup>

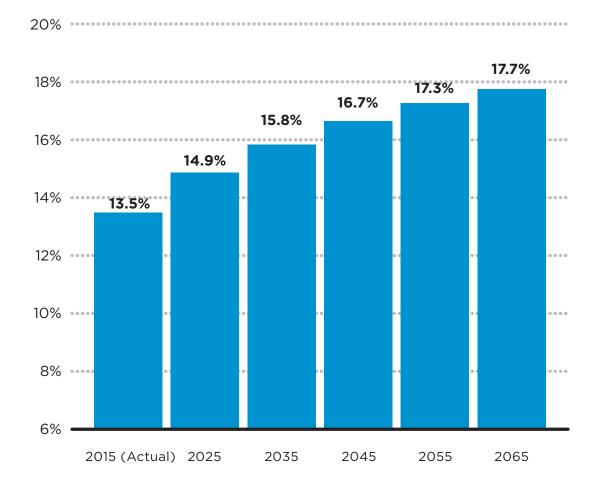
America's future prosperity is linked closely to the success of its immigrants. Attracting and assimilating dynamic and skilled immigrants will be essential to the continued growth of the U.S. economy.

<sup>30</sup> Modern Immigration Wave Brings 59 Million to U.S., Driving Population Growth and Change Through 2065: Views of Immigration's Impact on U.S. Society Mixed. Washington, D.C.: Pew Research Center, 2015.

<sup>31</sup> Ibid

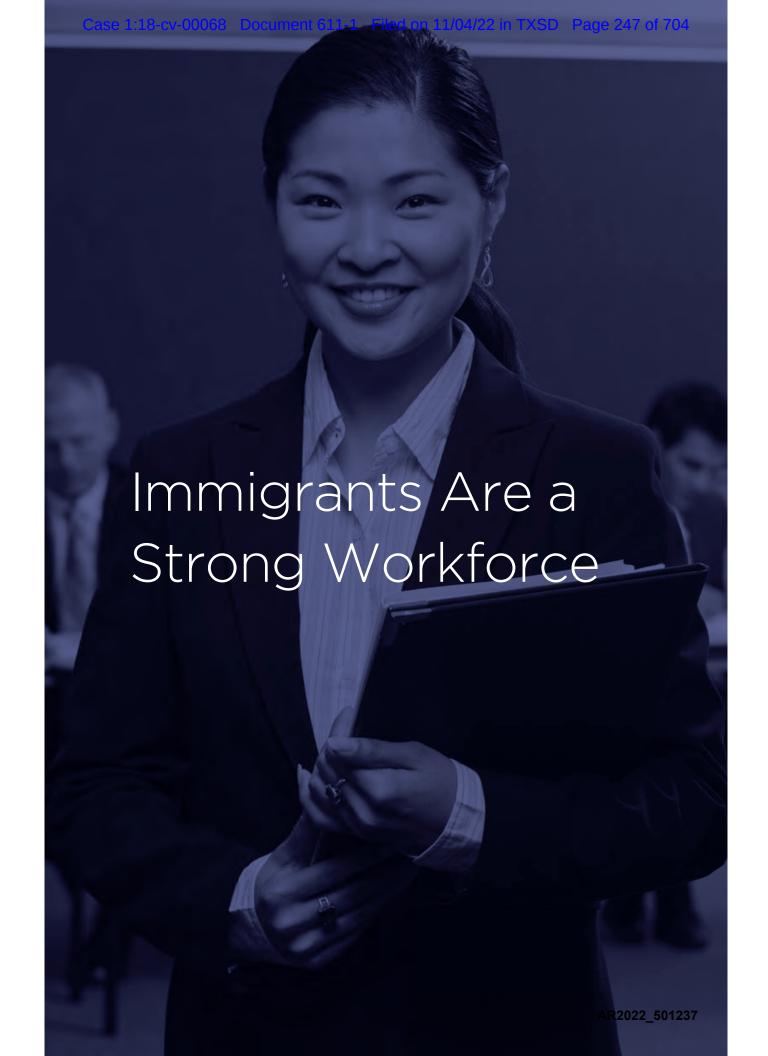


#### Projection of the Foreign-Born Population's Share of Total U.S. Population, by Decade



Source: U.S. Census Bureau, 2015 American Community Survey; Modern Immigration Wave Brings 59 Million to U.S., Driving Population Growth and Change Through 2065: Views of Immigration's Impact on U.S. Society Mixed. Washington, D.C.: Pew Research Center, 2015.

# Chapter 2: **Immigrants and Economic Growth**



#### Immigrants are more likely than natives to be employed.

**Significant Fact:** In 2015, 62.2% of immigrants aged 16 and older were employed compared to 58.1% of nativeborn citizens.

In order for an economy to grow, it needs workers and lots of them. In 2015, the U.S. had approximately 150 million people over the age of 16 who were employed. Just under 125 million of these workers were native-born citizens and nearly 26 million were immigrants.32

Although the total number of native-born workers in the U.S. is greater, a higher percentage of immigrants are employed. In 2015, 62.2 percent of immigrants aged 16 and older were employed, compared to 58.1 percent of native-born citizens.<sup>33</sup> While a 4.1 percentage point difference in the employment rates may seem small, if nativeborn workers were employed at the same rate as immigrants, the economy would have had an additional 8.8 million workers in 2015.34

Readers should note that although immigrants are employed at a higher rate, this does not necessarily mean immigrants "take" jobs from native-born Americans. A fuller discussion of the effect immigrants have on the employment of natives is presented on pages 118-19.

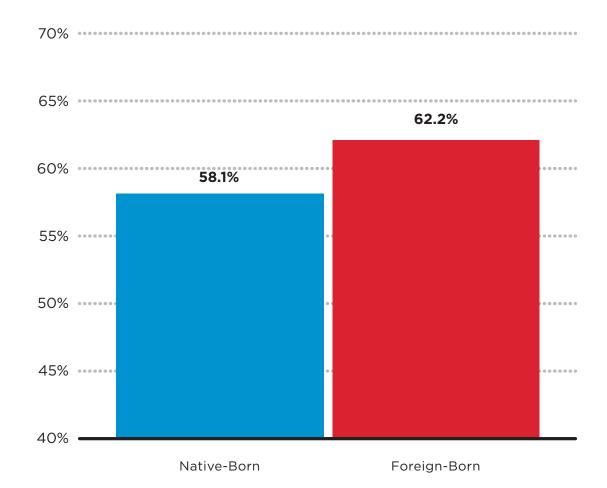
<sup>32</sup> Author's calculations, Data from U.S. Census Bureau, 2015 American Community Survey.

<sup>33</sup> U.S. Census Bureau, 2015 American Community Survey.

<sup>34</sup> Author's calculations, Data from U.S. Census Bureau, 2015 American Community Survey.



#### Percentage of All People Age 16 and Older Who Are Employed, 2015, Foreign-Born vs. Native-Born



Source: U.S. Census Bureau, 2015 American Community Survey.

#### **Immigrants are more** likely than natives to be in the labor force.

**Significant Fact:** In 2015, **immigrants** accounted for approximately 13.5% of America's population, but 16.6% of its civilian labor force.

The civilian labor force refers to all people in the U.S. who report that they are working or are in search of work.<sup>35</sup> As the chart shows, immigrants make up a substantial component of the U.S. labor force.

The bottom bar in the graph shows the immigrant share of the U.S. population from 2003 to 2015. The top bar shows the percentage of the total U.S. civilian labor force that immigrants represent. What is immediately clear is that immigrants have consistently had a more prominent role in the labor force than one would expect given their representation in the country's population. In 2003, 11.7 percent of all U.S. residents were immigrants, but immigrants represented 14.3 percent of the labor force. Throughout the 2000s, both of these proportions grew, and by 2015, immigrants accounted for approximately 13.5 percent of the country's population and 16.8 percent of the civilian labor force.<sup>36</sup>

Immigrants participate in the labor force at a higher rate than natives. In 2015, approximately 65.8 percent of immigrants 16 years of age and older were in the labor force, compared to only 62.1 percent of native-born citizens.37

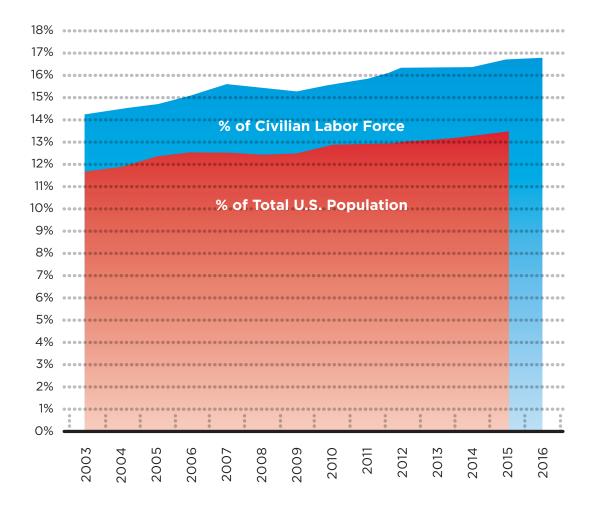
<sup>35</sup> Readers should note that the civilian labor force does not include those serving in the military or the institutionalized population.

<sup>36</sup> Author's calculations, U.S. Census Bureau, Current Population Survey: Annual Social and Economic Supplement; and U.S. Census Bureau, 2015 American Community Survey.

<sup>37</sup> U.S. Census Bureau, 2015 American Community Survey.



#### Foreign-Born Percentage of the U.S. Civilian Labor Force and of Total U.S. Population, 2003-16



Source: Author's calculations, data from U.S. Census Bureau, Annual Social and Economic Supplement; U.S. Census Bureau, American Community Survey.

#### **Immigrants** spur labor-force growth.

Significant Fact: **Immigrants are** responsible for nearly half of the total growth of the U.S. labor force over the past decade.

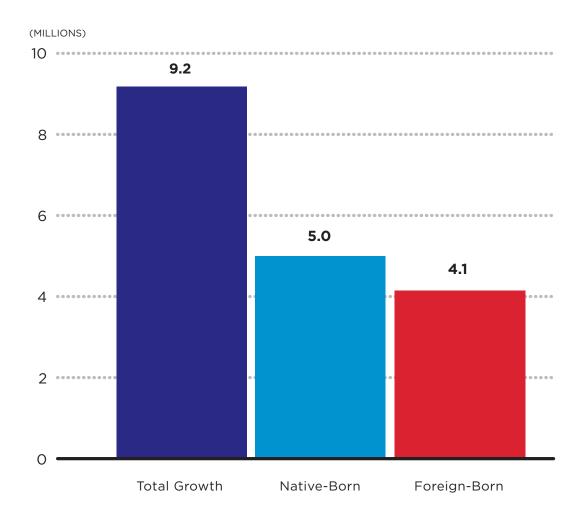
The growth in the U.S. labor force over the past decade would have been much smaller if not for immigrants. Between 2006 and 2016, the U.S. labor force added approximately 9.2 million workers. More than 4.1 million of these new workers were immigrants, while around 5 million of the new workers were native-born citizens.38

This means that some 45 percent of the growth in new workers over the past decade is attributable to immigrants. This is especially noteworthy considering that immigrants averaged only around 11 percent to 13 percent of the total U.S. population during those years. Without immigrants, America's labor force growth would have been much smaller, meaning fewer workers to help build the American economy.

38 U.S. Census Bureau, Current Population Survey: Annual Social and Economic



## Growth in the Number of Foreign-Born and Native-Born Workers, 2006-16



Source: Author's calculations, data from U.S. Census Bureau, Annual Social and Economic Supplement.

### **Immigrants are a** resilient workforce.

Significant Fact: **Immigrant work**ers suffered during the Great Recession, but their employment outlook overall proved fairly resilient.

The so-called "Great Recession" of 2007–09 hit the U.S. economy and its workers very hard. Between 2008 and 2010, more than 8 million lost their jobs, unemployment rose as high as 10 percent, and many more discouraged workers dropped out of the labor force entirely.

Immigrant workers suffered from the recession, but their employment outlook overall proved fairly resilient. In 2007, prior to the recession, approximately 22.5 million immigrants and 120.1 million natives over the age of 16 were employed.

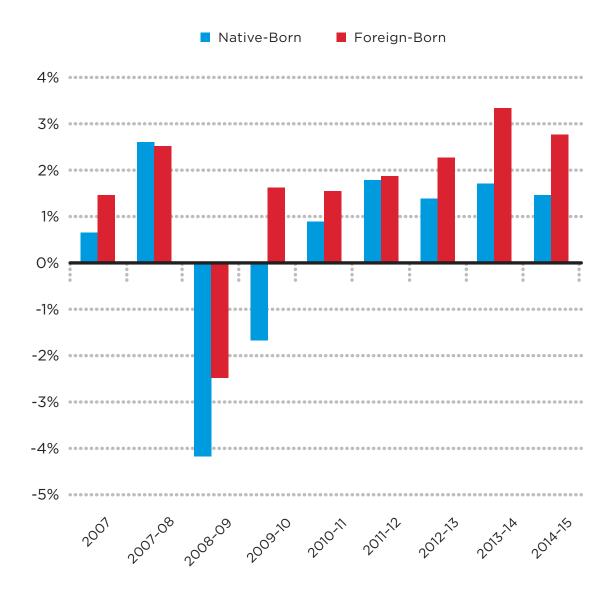
In 2008, during the depths of the recession, employment for both immigrants and natives contracted sharply. But the contraction was significantly less severe for immigrant employment. Between 2008 and 2009, immigrant employment dropped by 2.5 percent while native-born employment fell 4.1 percent. Over the next year, from 2009 to 2010, immigrant employment actually increased, while native employment suffered through another year of net job loss.

By 2011 immigrant job numbers had completely recovered and actually surpassed their pre-recession levels. Employment levels for natives unfortunately would not surpass their pre-recession peak until 2015.<sup>39</sup>

<sup>39</sup> Author's calculations; data from U.S. Census Bureau, 2006-15 American Community Survey.



### Percent Change in Total Employment for Foreign-Born and Native-Born Workers Age 16 and Over, Year over Year, 2007-15



Source: Author's calculations; data from U.S. Census Bureau, 2006-15 American Community Surveys.

### **Immigrant-intensive cities have** strong economic growth.

**Significant Fact:** Cities with large increases in their immigrant populations tend to experience strong economic growth.

How do varying immigration levels relate to the growth of the local economies of America's largest cities?

A study by the Fiscal Policy Institute finds that for the period of 1990 to 2006 among America's 25 largest metropolitan areas, the cities that experienced the largest percentage point increases in the immigrant share of their respective labor forces were largely the same cities that had the fastest-growing economies. Dallas, Phoenix, Houston, and Atlanta had the largest growth in the immigrant share of the labor force and also all enjoyed among the strongest economic growth of major American cities. Meanwhile, cities like Detroit, St. Louis, Cincinnati, Cleveland, and Pittsburgh saw very little immigration between 1990 and 2006, and had some of the slowest economic growth rates among major American cities. 40

Extending this analysis for the period 2006 to 2015 shows a similar trend. The 10 cities that experienced the largest percentage increase in the immigrant share of the labor force saw their collective per capita GDP increase by just over 4 percent during these years. Meanwhile, as a group, the 10 cities with the smallest percentage increase in the immigrant share of the labor force had slightly negative per capita GDP growth.<sup>41</sup>

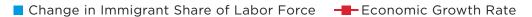
The data points do not prove that immigrants create economic growth. After all, it could be the case that economic growth attracts immigrants to these cities in the first place. Even so, the data suggest immigrants do not deter economic growth. Furthermore, it is a good thing if immigrants are moving to booming areas. Native-born Americans are not a highly mobile labor force, so immigrants help fill gaps in the labor market where they are needed.

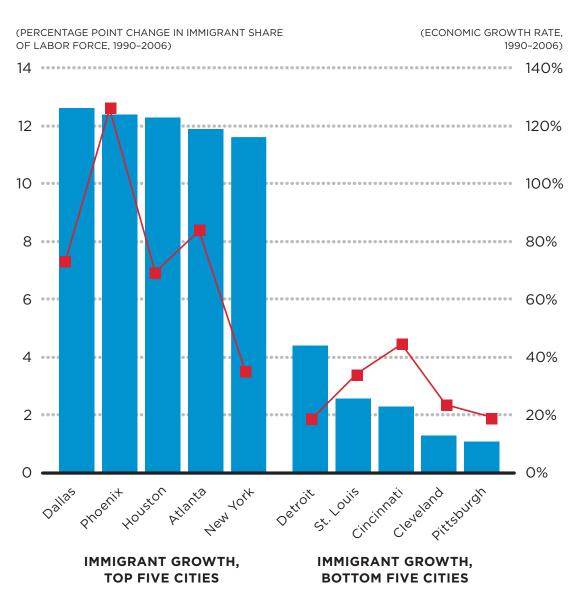
<sup>40</sup> David Kallick, Immigrants and the Economy: Contribution of Immigrant Workers to the Country's 25 Largest Metropolitan Areas, report (Fiscal Policy Institute, 2009), http://www.fiscalpolicy.org/ ImmigrantsIn25MetroAreas\_20091130.pdf.

<sup>41</sup> Author's calculations. Data from U.S. Census Bureau, 2015 American Community Survey; U.S. Bureau of Economic Analysis, Per capita real GDP by metropolitan area (chained 2009 dollars).



### Growth in Immigrant Share of Labor Force and Metro Area Economic Growth, 1990-2006





Source: Kallick, 2009.

Note: Economic growth of each metropolitan area is measured as percent growth in aggregate wage and salary earnings plus proprietors' income. The period of analysis used in this study is 1990 to 2005-07. The period "2005-07" is referred to as "2006" in the text and above graph and represents data from a three-year data file for combined years 2005, 2006, and 2007.

## Immigrants tell us about the state of our own economy.

Significant Fact:
In recent years,
more people
have moved
from the U.S. to
Mexico than in
the opposite
direction.

One way to learn about the health of the U.S. economy is to study the direction of the flow of immigrants. After all, immigrants often move to America to pursue better economic opportunities, so when the flow of immigrants slows or reverses, the economy is likely to be sluggish.

The U.S.-Mexico border is the largest two-way immigration corridor in the world, and historically most of the flow of immigrants has been in the direction of the U.S. During the period from 1995 to 2000, 2.27 million more people migrated to the U.S. from Mexico than migrated in the opposite direction.

However, in recent years, net migration to Mexico has been negative. For the period 2005 to 2010, approximately 20,000 more people moved to Mexico from the U.S. than to the U.S. from Mexico.<sup>42</sup> During the years from 2009 to 2014, net migration between the two countries favored Mexico again by some 130,000 people.<sup>43</sup>

The Pew Research Center reports that a majority of those returning to Mexico from the U.S. have done so voluntarily. While deportations from the U.S. have increased, some 61 percent of return migrants to Mexico cite family reunification as the reason for their return while only 14 percent cite deportation.<sup>44</sup>

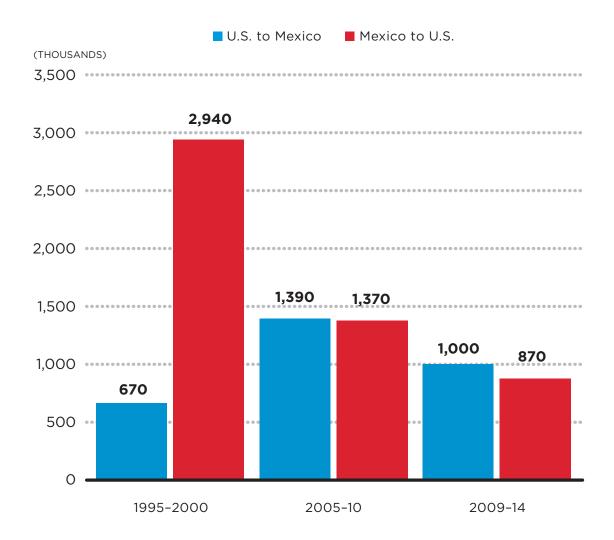
<sup>42</sup> Jeffrey Passel, D'Vera Cohn, and Ana Gonzalez-Barrera, *Net Migration from Mexico Falls to Zero—and Perhaps Less*, report (Washington, DC: Pew Research Center, 2012), http://www.pewhispanic.org/files/2012/04/Mexican-migrants-report\_final.pdf.

<sup>43</sup> Ana Gonzalez-Barrera, More Mexicans Leaving Than Coming to the U.S.: Net Loss of 140,000 from 2009 to 2014; Family Reunification Top Reason for Return, (Washington, D.C.: Pew Research Center, 2015), http://www.pewhispanic.org/2015/11/19/more-mexicans-leaving-than-coming-to-the-

<sup>44</sup> Ibid.



#### Number of People Moving Between the U.S. and Mexico, Selected Periods



Source: Figure 4 from Gonzalez-Barrera, 2015.

Immigrants Point to America's Economic Future



### **Immigrants are more** likely to live in a married-couple household.

**Significant Fact:** In 2015, 62.7% of immigrants lived in a married-couple household compared to 57.4% of nativeborn Americans. Married couples, on average, are more productive and enjoy higher standards of living, higher incomes, and better health outcomes compared to single individuals.

Moreover, children who grow up in married-couple households share these benefits and also have improved educational outcomes and brighter futures as adults.<sup>45</sup>

The academic literature suggests marriage is good for the economy, and it is notable that immigrants are more likely than natives to be married. In 2015, 58.7 percent of immigrants over the age of 15 were married, compared to 45.4 percent of natives. Furthermore, as is shown in the chart, 62.7 percent of immigrants lived in a household headed by a married couple in 2015, compared to 57.4 percent of native households.

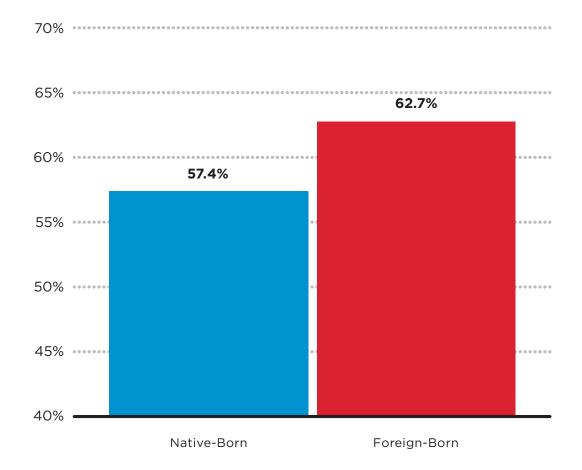
Data also show that immigrants are less likely to be divorced: 11.1 percent of immigrants over the age of 15 reported being divorced or separated in 2015 compared to 13.5 percent of natives.46

<sup>45</sup> There is a vast literature on the economic gains from marriage. For a review of the literature, and a review of the statistical techniques employed in various studies, see David C. Ribar, What Do Social Scientists Know About the Benefits of Marriage? A Review of Quantitative Methodologies, working paper no. 998 (Bonn: IZA, 2004), http://ftp.iza.org/dp998.pdf.

<sup>46</sup> U.S. Census Bureau, 2015 American Community Survey



### Percentage of People Living in a Married-Couple Household, Native-Born vs. Foreign-Born, 2015



Source: U.S. Census Bureau, 2015 American Community Survey.

### Immigrants are of working age ...

Significant Fact: More than 70% of immigrants are between the ages of 25 and 64, compared to less than 50% of natives.

A population pyramid is the graphical display of a society's age structure, plotting the percentage of the total population that falls between various age categories.

It is generally desirable for the shape of the population pyramid to indeed reflect that of a pyramid because it suggests there are enough young people to produce goods and services for themselves as well as for the older population. When this display takes a pyramid shape, the number of people in society is inversely related to age, such that the population pyramid shows a large base of young people with each subsequent age group representing a slightly smaller percentage share of the total population.

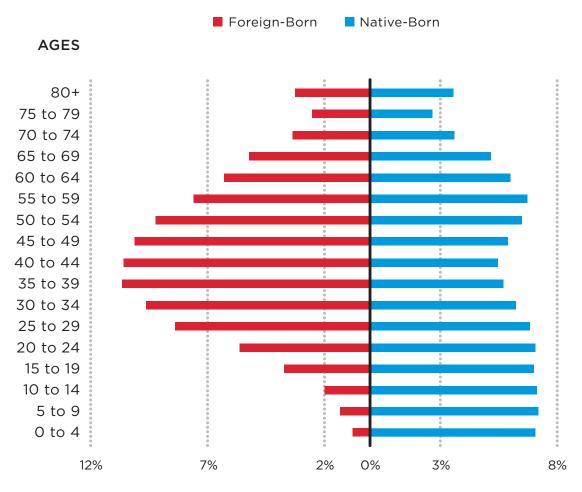
The chart shows that among native-born U.S. citizens, the shape of the population pyramid is not a pyramid at all. Rather, it is fairly straight, with a nearly equal proportion of people aged 50 to 65 as aged 30 years and younger. In the short term this does not pose any real threat because there are still far more people working than retired. However, as the large share of the population that is now over 50 years of age begins retiring, this may pose significant challenges to the economy.

By contrast, the population pyramid of immigrants in the U.S. reflects a more ideal distribution. It shows the largest portion of the population is between the ages of 25 and 55.47 This is because immigrants typically come to the U.S. in middle age, meaning that immigrant populations have smaller proportions of the young and the old. Workers are at their most productive in middle age, and the constant inflow of middle-aged immigrants helps grow the economy and care for the country's elderly.

<sup>47</sup> Author's calculations. Data from U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2016.



### Percentage of the Population in Each Age Distribution, 2016, Foreign-Born and Native-Born



PERCENTAGE OF TOTAL POPULATION

Source: Author's calculations. Data from U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2016.

### ... Most immigrants are not children.

**Significant Fact: Immigrants** usually come to the U.S. during their prime working years. In 2015, less than 6% of immigrants in the U.S. were under the age of 18.

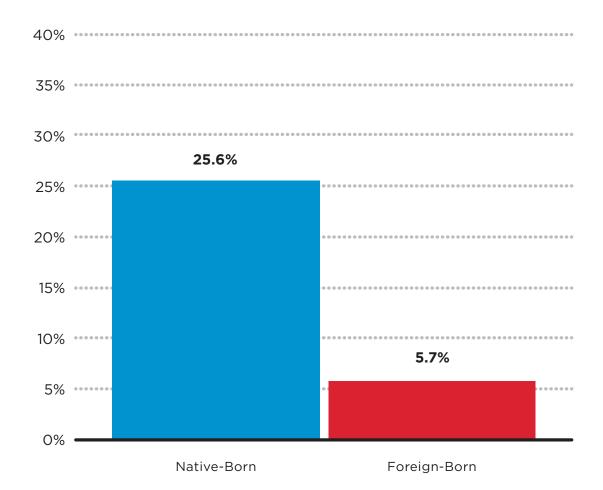
In 2015, only 5.7 percent of U.S. immigrants were under the age of 18.48 Usually this would pose a problem for a society, since it suggests that in future years the size of the workforce would be much smaller than the size of the elderly population. However, since immigrants come to the U.S. in their prime working years, the immigrant population has a large proportion of workers even in the absence of a large population of young people.

In this way, the shape of the U.S. immigrant population pyramid — which has a bulge representing a large proportion of middle-aged people relative to young and elderly people — is even more advantageous than a traditional pyramid shape. Young people, while vibrant and future workers, are dependent upon middle-aged people to care for them. Since immigrants usually come as adults, they contribute to the economy without requiring resources to be expended on them in the U.S. when they are children.

<sup>48</sup> Author's calculations, Data from U.S. Census Bureau, 2015 American Community Survey.



### Percentage of the Foreign-Born and Native-Born Populations Under 18 Years of Age, 2015



Source: U.S. Census Bureau, 2015 American Community Survey.

### **Immigrants have a** much more favorable worker-to-dependent ratio.

Significant Fact:

**Among** immigrants in the U.S., there are nearly four people of working age for every person under the age of 18 or over the age of 64. Among natives, that ratio stands at 1.5 to 1.

An important indicator of the health of an economy is the ratio of the working-age population to the dependent-age population. Typically, the working-age population is considered those people between the ages of 18 and 64 while the dependent-age population is considered those people 17 years and younger and those people 65 years of age and older. Economies with more workers per dependent person have a better outlook because there are more workers available to produce for the young and old.

The chart on the next page shows the number of people in the working-age population divided by the number of people in the dependent-age population for both the native-born and foreign-born populations in the U.S.

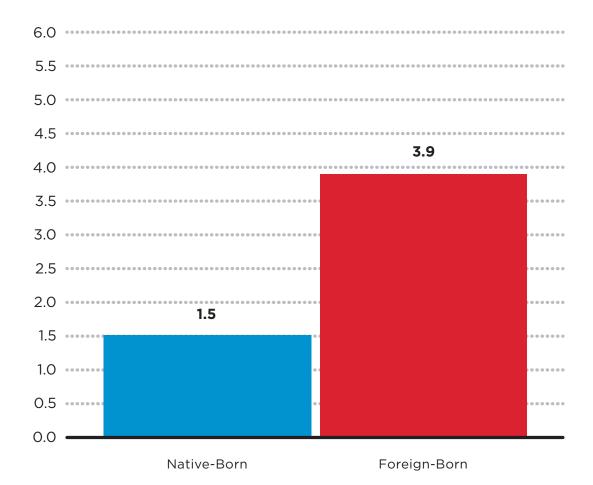
The results are stark. In 2015, immigrants in the U.S. had nearly four people of working age for every dependent. By contrast, the native-born population had only 1.5 people of working age for every dependent.49

As America's native-born population continues to age, the influx of immigrants into the labor force will be of increasing importance to maintain a strong and growing economy.

<sup>49</sup> Author's calculations, data from U.S. Census Bureau, 2015 American Community Survey.



#### Working-Age People per Non-Working-Age People, Foreign-Born vs. Native-Born, 2015



Source: Author's calculations, data from U.S. Census Bureau, 2015 American Community Survey.

Note: The term "Working-Age" is defined as those people 18–64 years of age. The term "Non-Working-Age" is defined as those people under the age of 18 or over the age of 64.

### America's future workforce growth depends on immigrants and their children.

**Significant Fact:** It is projected that between 2015 and 2035, the native-born population of prime working age will decline. Meanwhile, the number of immigrants and their U.S.born children of prime working age will increase by over 18 million.

Immigrants already represent an important component of the U.S. labor force, but their role will become even more important in coming years.

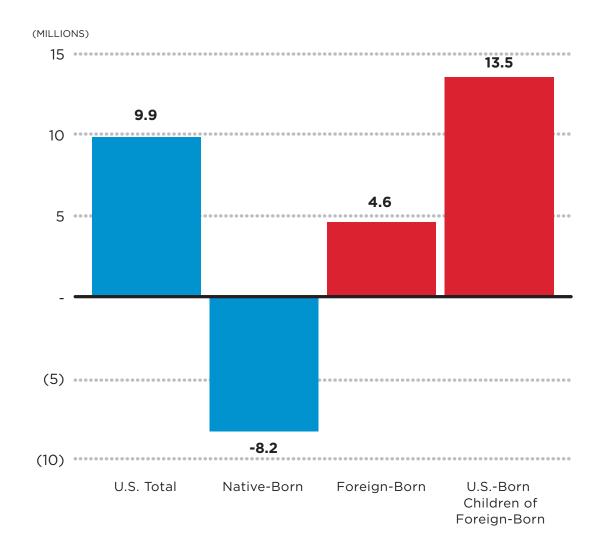
The aging of America's "baby boom" generation, coupled with falling birthrates among Americans, means the number of native-born Americans in their prime working years will decline in coming decades. The Pew Research Center estimates that the number of native-born Americans with U.S.-born parents who are in the prime working age range of 25–64 years old will decrease by some 8.2 million in the two decades from 2015 to 2035.

Meanwhile, the Pew Research Center projections indicate first- and second-generation immigrants of prime working age will increase by 18.1 million between 2015 and 2035. These will offset the decrease of native-born Americans and result in America's total prime working-age population increasing by approximately 10 million by 2035. While an increase of 10 million represents a growth rate that is considerably smaller than in past decades, the fact that it is an increase at all is thanks to immigrants and their children. In this way, immigrants help alleviate America's demographic challenge of an aging population.<sup>50</sup>

<sup>50</sup> Jeffrey S. Passel and D'Vera Cohn, *Immigration Projected to Drive Growth in U.S. Working-age Population through at Least 2035* (Washington, D.C.: Pew Research Center, 2017), http://www.pewresearch.org/fact-tank/2017/03/08/immigration-projected-to-drive-growth-in-u-s-working-age-population-through-at-least-2035/.



## Projected Growth of the U.S. Prime Working-Age Population (25–64 Years), Foreign-Born and Native-Born, 2015 to 2035



Source: Passel and Cohn, 2017.

## Immigrants Drive Innovation in America's Economy



# The share of immigrants with a college degree is growing ...

Significant Fact:
Immigrants who
have arrived
since 2010 are
more likely
than natives
to possess
a bachelor's
degree.

A highly educated workforce is important for strong economic growth. Economic theory suggests that as workers gain more education, their "human capital" and productivity increase. Most economists believe productivity gains are the single most important ingredient for economic growth.

As workers become more productive, their incomes increase. In 2015, median annual earning for all full-time, year-round workers in the U.S. totaled around \$48,000. But for workers with a college degree, median earnings were substantially higher, at more than \$61,000 per year. And for the most educated workers, those with doctoral or professional degrees, earnings often exceeded \$100,000 or even \$110,000 per year.<sup>51</sup>

As of 2015, native-born citizens were still more likely to possess a bachelor's degree or higher compared to immigrants: 30.8 percent of all native-born citizens aged 25 years and older had earned a bachelor's degree or higher, compared to 29.4 percent of immigrants.<sup>52</sup> Even so, immigrants account for an important and growing share of America's highly educated workers.

Recent immigrants to the U.S. are much more likely to have a college degree compared to immigrants who came in earlier periods. In fact, some 45.2 percent of immigrants arriving in the U.S. since 2010 have at least a bachelor's degree. This is a significantly higher percentage than the average for natives in 2015, and reflects the very positive trend of improving educational achievement among recent immigrants to the U.S.<sup>53</sup>

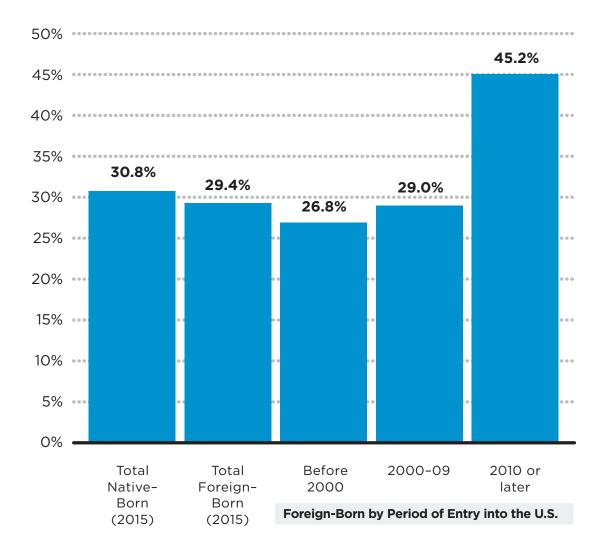
<sup>51</sup> U.S. Census Bureau, Current Population Survey, 2016 Annual Social and Economic Supplement, Table PINC-03. Educational Attainment--People 25 Years Old and Over, by Total Money Earnings in 2015, Work Experience in 2015, Age, Race, Hispanic Origin, and Sex.

<sup>52</sup> U.S. Census Bureau, 2015 American Community Survey.

<sup>53</sup> Ibid.



Percentage of Foreign-Born People with a Bachelor's Degree or Higher, by Period of Entry into the United States, 2015



Source: U.S. Census Bureau, 2015 American Community Survey.

Note: Data are for individuals 25 years of age and older.

## ... And immigrants are more likely than natives to have an advanced degree.

**Significant Fact:** Although many immigrants have low levels of education, many others are among the most educated workers in the

U.S. economy.

Workers with graduate and professional degrees are especially productive members of America's economy. Although immigrants are slightly less likely to have a bachelor's degree compared to natives, they are more likely to have earned a graduate or professional degree. In 2015, 12.4 percent of immigrants possessed a graduate or professional degree compared to 11.4 percent of natives.<sup>54</sup>

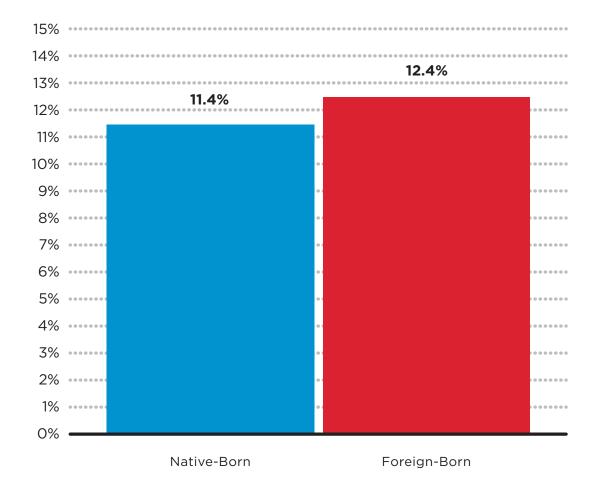
The growth in the share of immigrants with advanced degrees among recent waves of immigrants is especially noteworthy. In 2011, 10.4 percent of immigrants who came to the U.S. prior to 1990 reported having an advanced degree.<sup>55</sup> When surveyed in 2015, 12.5 percent of immigrants who came to the U.S. between 2000 and 2009 had an advanced degree. And among immigrants who came to the U.S. after 2010, 19.8 percent had advanced degrees.<sup>56</sup> These most highly educated immigrants are crucial to America's future economic growth.

It should be noted that although many immigrants are highly educated, overall the educational attainment achieved by immigrants in the U.S. varies greatly. Indeed, a large share of immigrants have little formal education at all. Data on the lesser-educated immigrant population are presented on pages 114–17.

54 U.S. Census Bureau, 2015 American Community Survey. 55 U.S. Census Bureau, 2011 American Community Survey. 56 U.S. Census Bureau, 2015 American Community Survey.



### Percentage of the Population Possessing a Graduate or Professional Degree, Native-Born and Foreign-Born, 2015



Source: U.S. Census Bureau, 2015 American Community Survey.

Note: Data are for the percentage of the population 25 years of age and older who have earned a graduate or professional degree.

### Immigrants receive a disproportionate share of STEM degrees.

**Significant Fact:** More than half of all doctoral degrees in engineering granted by U.S. universities are earned by foreign-born students.

The U.S. has long benefited from its ability to attract top foreign-born scientists. German-born Albert Einstein and Scottish-born Alexander Graham Bell are obvious examples of U.S. inventors who pushed the boundaries of human understanding. But they are hardly alone.

To this day, the foreign-born are helping push science forward in America. They account for a disproportionate share of degrees in science, technology, engineering, and mathematics (STEM) fields. In fact, more than half of all doctoral degrees granted by U.S. universities in engineering are earned by foreign-born students. And in the physical sciences — which include mathematics and computer science — that number stands at over 40 percent. 57

These STEM graduates help form the backbone of America's high-tech work force. In 2013, immigrants represented more than one in four college-educated workers in nonacademic U.S. science and engineering jobs. Among such workers with doctorate degrees, 42.1 percent were immigrants, an increase from 36.4 percent in 2003 and 26.8 percent in 1993.58 These workforce statistics are even more impressive when one remembers that immigrants accounted for only around 13 percent of the total U.S. population in 2013.

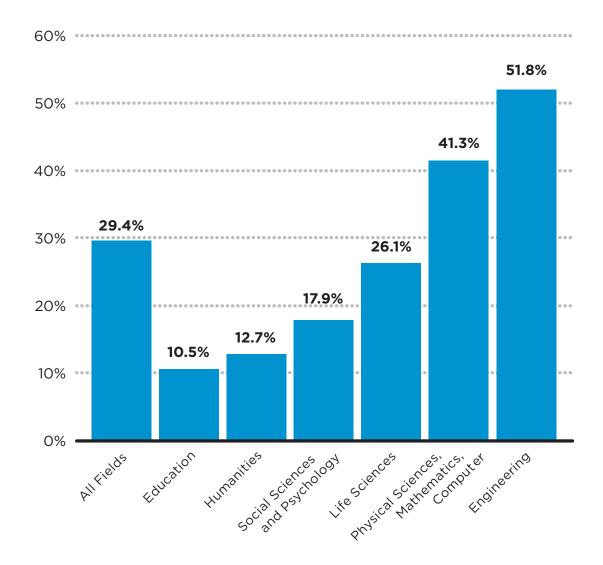
Of course, many of these STEM graduates are in the U.S. on student visas or high-skilled H-1B visas. Such visas allow foreigners to remain and work in the U.S. on a temporary basis. This has led many highly skilled foreigners to be forced to leave the U.S. More discussion of this issue is included on pages 168–71.

<sup>57</sup> Author's calculations. Data from National Science Foundation, National Center for Science and Engineering statistics, Survey of Earned Doctorates, Table 17: Doctorate recipients, by broad field of study and citizenship status: Selected years, 1985-2015.

<sup>58 &</sup>quot;Chapter 3. Science and Engineering Labor Force," in Science and Engineering Indicators 2016 (National Science Foundation, 2016), Table 3-25, https://www.nsf.gov/statistics/2016/nsb20161/#/report/chapter-3/ immigration-and-the-s-e-workforce.



### Percentage of Doctoral Degrees Granted by U.S. Institutions to International Students, by Field of Study, 2015



Source: Author's calculations. Data from National Science Foundation, National Center for Science and Engineering statistics, Survey of Earned Doctorates, *Table 17: Doctorate recipients, by broad field of study and citizenship status: Selected years, 1985–2015.* 

### Immigrants lead in scientific research.

Significant Fact: Since the year 2000, immigrants in the U.S. have received nearly 40% of all Nobel **Prizes awarded** to Americans in the fields of chemistry, medicine, and physics.

Immigrants distinguish themselves in many ways. One of the more remarkable ways is through their achievements in scientific research.

One interesting way to gauge their contributions is to analyze how often they win top awards like the Nobel Prize, which honors those who have made groundbreaking discoveries in the areas of chemistry, medicine, physics, literature, international peace, and economics.

Between 2000 and 2016, Americans received 78 Nobel Prizes in the fields of chemistry, medicine, and physics. Of those 78 awards, nearly 40 percent (or 31 in total) went to U.S. immigrants. This is a large percentage, especially considering that immigrants represent only 13.5 percent of the total U.S. population.

Over the last half-century, the number of American immigrants winning the Nobel Prize in chemistry, medicine, and physics increased dramatically. From 1901 through 1959, only 25 U.S. immigrants were recipients. But during the 56 years since (the period 1960–2016), immigrants in the U.S. have won 79 awards. In 2016 all six American recipients of Nobel Prizes in economics and scientific fields were immigrants.<sup>59</sup>

Immigrant scientists have been recognized with other honors as well. A paper published in 1999 by Sharon Levin and Paul Stephan found that immigrant scientists were disproportionately represented among the ranks of the National Academy of Sciences and the National Academy of Engineering.<sup>60</sup>

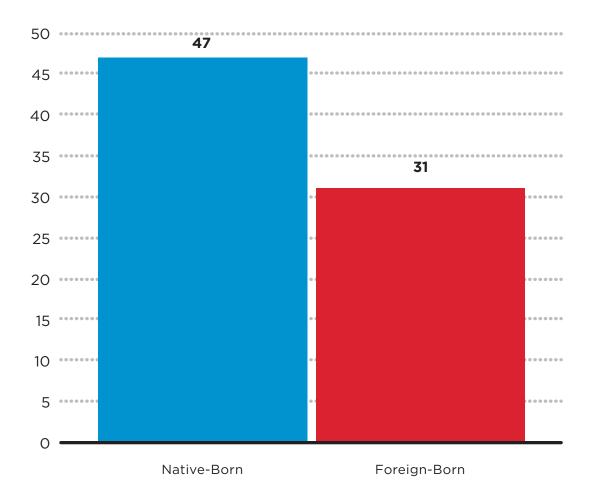
Scientific research plays a fundamental role in developing innovations. Immigrants' contributions are undeniable, and they help drive the economy forward.

<sup>59</sup> Immigrants and Nobel Prizes, report (National Foundation for American Policy, 2016), http://nfap.com/wp-content/uploads/2016/10/Immigrantsand-Nobel-Prizes.NFAP-Policy-Brief.October-2016.pdf.

<sup>60</sup> Paula E. Stephan and Sharon G. Levin, "Exceptional Contributions to US Science by the Foreign-born and Foreign-educated," Population Research and Policy Review 20 (2001): 59-79.



## Number of Nobel Prizes Won by Americans in Chemistry, Medicine, and Physics, Foreign-Born and Native-Born, 2000-16



Source: Anderson, 2016.

## Immigrants are disproportionately responsible for U.S. international patent applications.

**Significant Fact:** In 2006, non-citizen **immigrants** living in the U.S. applied for almost onequarter of all the international patent applications filed by people residing in the U.S. that year.

The World Intellectual Property Organization (WIPO) defines a patent as the "exclusive right granted for an invention, which is a product or a process that provides, in general, a new way of doing something, or offers a new technical solution to a problem."61 The number of applications for patents is one of the best barometers of innovation in an economy because it measures the number of new ideas being introduced.

According to research by Vivek Wadhwa and others using data from the WIPO, in 2006 non-citizen immigrants living in the U.S.<sup>62</sup> were responsible for filing one-quarter of all the international patent applications filed by people residing in the U.S. that year. This is an increase from the 7.6 percent of all international patents submitted by immigrants in the U.S. in 1998.<sup>63</sup>

Many companies rely on immigrants to help generate new ideas. At Qualcomm, Inc., foreign-born employees<sup>64</sup> were responsible for 72 percent of the company's international patent applications. At other major companies, it's a similar story: 65 percent of international patent applications at Merck & Co., 64 percent at General Electric, 63 percent at Siemens, and 60 percent at Cisco. Among international patent applications filed by the U.S. government, the foreignborn were responsible for an impressive 41 percent of such applications.<sup>65</sup>

These figures significantly *understate* the actual share of U.S. international patents filed by

<sup>61 &</sup>quot;Patents," World Intellectual Property Organization, accessed October 28, 2012, http://www.wipo.int/patentscope/en/.

<sup>62</sup> Note that this data set excludes naturalized U.S. citizens.

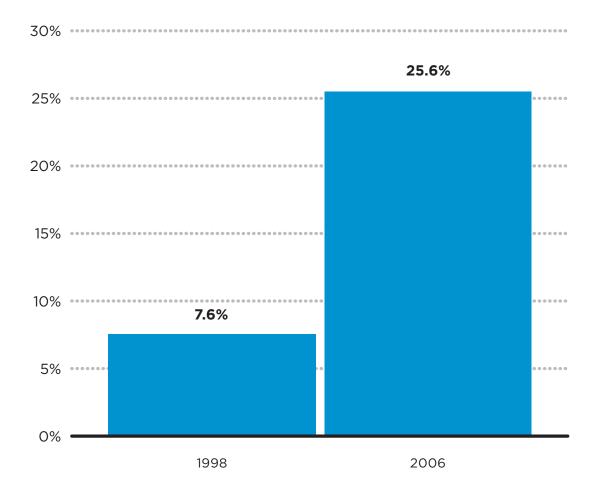
<sup>63</sup> Vivek Wadhwa et al., Intellectual Property, the Immigration Backlog, and a Reverse Brain-Drain: America's New Immigrant Entrepreneurs, Part III, report (2007), http://www.kauffman.org/~/media/kauffman\_org/research%20 reports%20and%20covers/2007/08/reverse\_brain\_drain\_101807.pdf.

<sup>64</sup> Categorized as non-citizen foreign-born living in the U.S. or employees of the company born and working abroad.

<sup>65</sup> Vivek Wadhwa et al., Intellectual Property, the Immigration Backlog, and a Reverse Brain-Drain: America's New Immigrant Entrepreneurs, Part III, report (2007), http://www.kauffman.org/~/media/kauffman\_org/research%20 reports%20and%20covers/2007/08/reverse brain drain 101807.pdf.

immigrants. Wadhwa's data set allowed him to determine the immigrant status of only "non-citizen" immigrants. The findings therefore exclude immigrants in the U.S. who are naturalized citizens. In 2013, there were more than 19 million such immigrants. If these immigrants were identifiable in the data set, it is almost certain that immigrants' overall share of all international patent applications would be even larger.

Percentage of Total U.S. International Patent Applications Filed by Non-Citizen Foreign-Born Population, 1998 and 2006



Source: Wadhwa, et al., "Intellectual Property, the Immigration Backlog, and a Reverse Brain-Drain."

Note: Data refer to the "Non-Citizen Foreign-Born Population," i.e., this data set does not include foreign-born naturalized citizens.

### Immigrants are more likely to be granted a patent ...

**Significant Fact: Immigrant** college graduates are granted more patents on average than similarly educated nativeborn Americans.

Of course applying for a patent is not the same thing as being granted a patent, which is certification from an outside authority that an idea is actually innovative.

Using data from the National Survey of College Graduates, economist Jennifer Hunt assessed the percentage of immigrants granted patents. She found that 2.0 percent of all immigrant college graduates in 2000 reported they had been granted at least one patent. This proportion is double the percentage of native-born Americans who reported having received a patent (0.9 percent). Furthermore, immigrant college graduates were granted more patents per capita than natives: 0.054 patents per immigrant college graduate compared to 0.028 patents per native college graduate in 2000.67

Other research further links immigrants to patent activity. A recent study published by Harvard Business School examines historical differences between U.S. states in terms of patent activity and immigration. The study finds that in the 10 states with the most patents per capita over the period 1880 to 1940, the foreign-born share of the population was over 20 percent. Meanwhile, only 1.7 percent of the population was foreign-born in the 10 states with the fewest patents per capita.68

What's more, a study from the Partnership for a New American Economy finds at top U.S. universities, immigrants lead the way with respect to patents. Among the 10 universities receiving the most patents in 2011, 76 percent of all patent awards named at least one immigrant as the grantee.69

<sup>66</sup> Jennifer Hunt, "Which Immigrants Are Most Innovative and Entrepreneurial? Distinctions by Entry Visa," Journal of Labor Economics 29, no. 3 (July 2011).

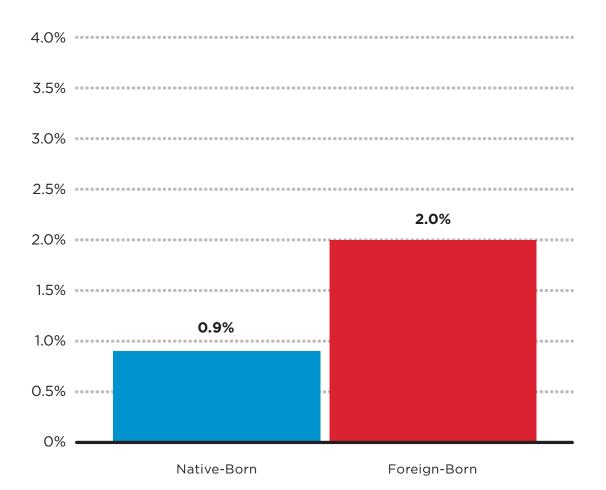
<sup>67</sup> Jennifer Hunt and Marjolaine Gauthier-Loiselle, "How Much Does Immigration Boost Innovation?" American Economic Journal: Macroeconomics, *American* Economic Association 2, no. 2 (2010).

<sup>68</sup> Ufuk Akcigit, John Grisby, and Tom Nicholas, Immigration and the Rise of American Ingenuity, Working paper no. 17-06, Harvard Business School, 2017.

<sup>69</sup> Patent Pending: How Immigrants Are Reinventing the American Economy, report (Partnership for a New American Economy, 2012), http://www. renewoureconomy.org/wp-content/uploads/2013/07/patent-pending.pdf.



### Percentage of Native-Born and Foreign-Born College Graduates Who Have Ever Been Granted a Patent, 2000



Source: Hunt, 2011.

## ... And a greater percentage of immigrants commercialize their patents.

**Significant Fact: Immigrants have** proven their success at bringing ideas to the marketplace.

Patents especially help grow the economy when they are commercialized or licensed. Jennifer Hunt finds that 1.3 percent of immigrant college graduates had commercialized a patent in 2000, compared to 0.6 percent of natives.

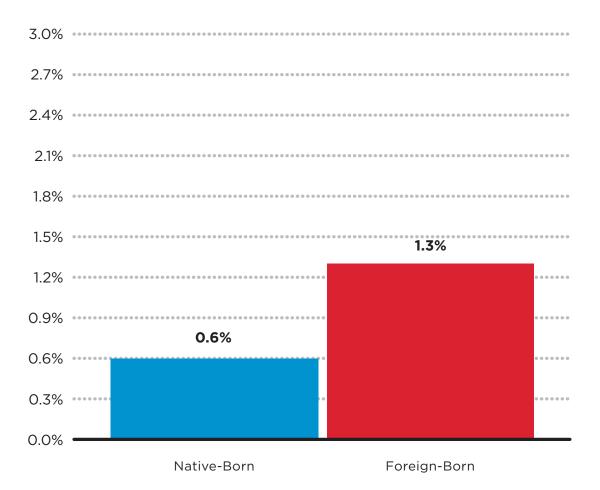
Furthermore, the number of patents commercialized by immigrant college graduates was more than 1.5 times the number of patents per capita commercialized by natives. In 2000, immigrant college graduates had commercialized approximately 27 patents for every 1,000 immigrant college graduates in the population, compared to around 17 patents commercialized by native college graduates per every 1,000 natives.<sup>70</sup>

This innovation and entrepreneurialism are key drivers of long-term economic growth.

<sup>70</sup> Jennifer Hunt, "Which Immigrants Are Most Innovative and Entrepreneurial? Distinctions by Entry Visa.," Journal of Labor Economics 29, no. 3 (July 2011).



### Percentage of Native-Born and Foreign-Born College Graduates Who Have Commercialized a Patent, 2000



Source: Hunt, 2011.

### Immigrants are more likely to publish a scholarly work ...

Significant Fact: **Immigrants** share new ideas by publishing scholarly research.

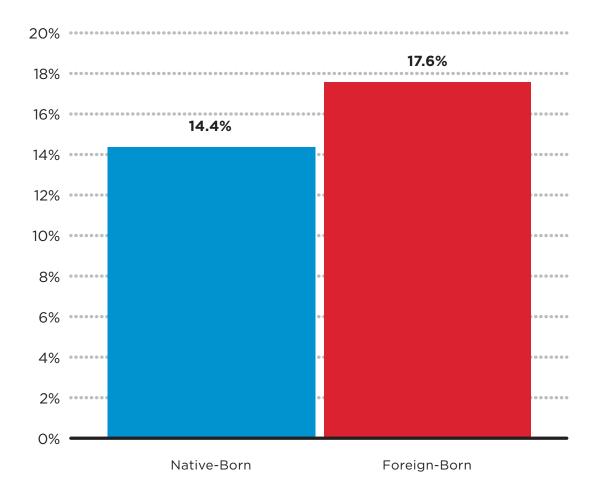
New ideas are introduced into the economy through published research. For academic research to be accepted for publication, it must be reviewed by qualified peers. In addition, research that is accepted for publication often must express a new idea, or offer a new and cogent interpretation of an existing idea.

Data suggest that immigrants are more likely than natives to have published their research. In 2000, 17.6 percent of immigrants who had graduated from college reported having published a book, journal article, or paper for presentation at a conference. Only 14.4 percent of native-born college graduates reported having done likewise.<sup>71</sup>

<sup>71</sup> Jennifer Hunt, "Which Immigrants Are Most Innovative and Entrepreneurial? Distinctions by Entry Visa.," Journal of Labor Economics 29, no. 3 (July 2011).



#### Percentage of Native-Born and Foreign-Born College Graduates Who Have Ever Published a Scholarly Work, 2000



Source: Hunt, 2011.

# ... And immigrants have a greater number of publications, on average.

**Significant Fact: Immigrants** are more likely than natives to publish, and they publish more.

Not only are immigrants more likely to have ever published a scholarly work, they have more publications on average. In 2000, among immigrant college graduates who reported having ever published, 6.8 percent had published six or more scholarly works, compared to 3.6 percent of nativeborn college graduates.<sup>72</sup>

Quantity of publications is one indicator, but the impact of a researcher's scholarly work is what's especially important. Levin and Stephan (2001) examine immigrant contributions to what they term "classic" scientific journal articles, i.e., those papers that have "a lasting effect on the whole of science." They find that approximately 30 percent of the authors of these highly impactful articles were foreign-born.<sup>73</sup>

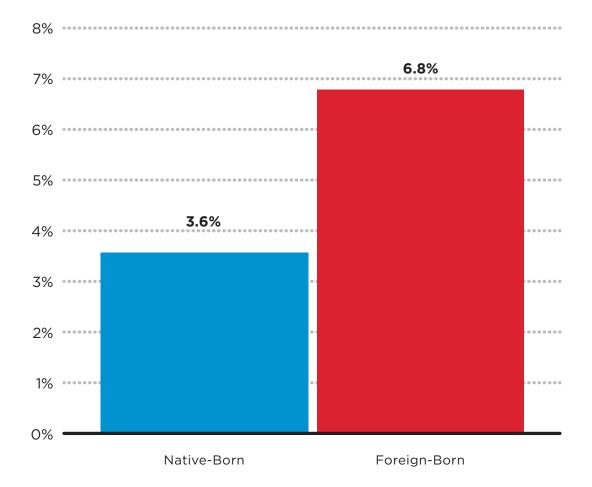
Clearly immigrants play an important role in developing the new ideas that unleash innovation and enable stronger economic growth.

<sup>72</sup> Jennifer Hunt, "Which Immigrants Are Most Innovative and Entrepreneurial? Distinctions by Entry Visa," Journal of Labor Economics 29, no. 3 (July 2011).

<sup>73</sup> Paula E. Stephan and Sharon G. Levin, "Exceptional Contributions to US Science by the Foreign-born and Foreign-educated," Population Research and Policy Review 20 (2001): 59-79.



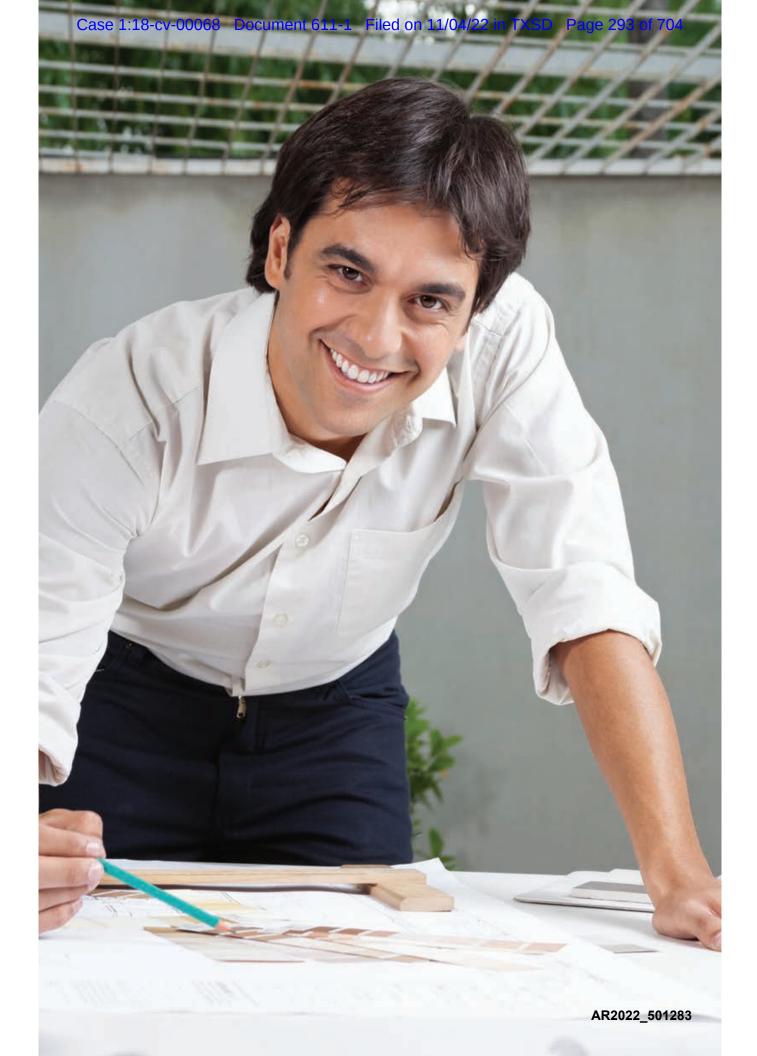
#### Percentage of Scholars with at Least Six Publications, 2000 Foreign-Born vs. Native-Born



Source: Hunt, 2011.

Note: Sample is for college graduates who report having ever published a book, journal article, or paper for presentation at a conference.

# Immigrants Are Entrepreneurs



# Immigrants are more likely to be self-employed and work in the private sector.

**Significant Fact:** In 2015, 7.6% of immigrants in the U.S. were self-employed, compared to 5.6% of natives.

Not only are immigrants more likely to participate in the labor force and be employed, they also are more likely than native-born citizens to create their own jobs and to work in the private sector. In 2015, 84.0 percent of immigrants were private wage and salary workers, compared to 79.5 percent of natives.74 Furthermore, 7.6 percent of immigrants were self-employed in an unincorporated business, 75 compared to only 5.6 percent of natives. Immigrants often create their own jobs and exhibit characteristics of entrepreneurship.

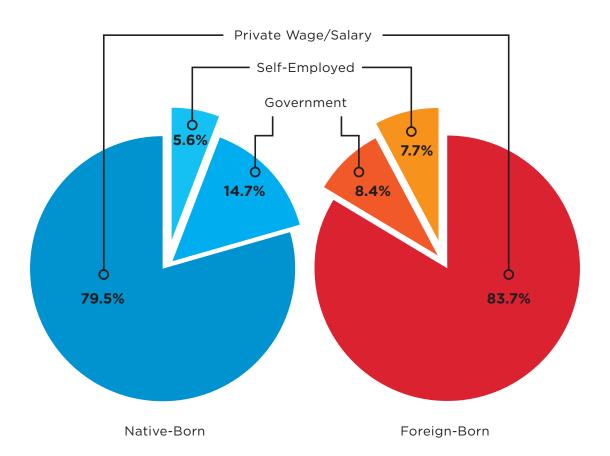
Native-born workers do constitute a larger share of workers in one specific employment sector: government jobs. While many government jobs are certainly necessary and beneficial to our country, these jobs must be funded by taxpayers. Private-sector jobs, on the other hand, are self-sustaining. Therefore, strong economic growth relies especially on privatesector workers.

74 U.S. Census Bureau, 2015 American Community Survey.

<sup>75</sup> Self-employed individuals who report working for an incorporated business are classified as "Private Wage and Salary" workers.



# Workers by Sector of Occupation, 2015, Foreign-Born and Native-Born



Source: U.S. Census Bureau, 2015 American Community Survey.

Note: "Self-Employed" is defined by the American Community Survey as those people who own an unincorporated business.

#### Immigrants form new businesses at almost twice the rate of native-born Americans.

**Significant Fact: Immigrants start** new businesses at a higher rate than do native-born Americans.

The creation of new businesses is essential for economic growth. New firms bring new ideas to the marketplace and compete with existing firms. When this happens, consumers benefit through more choices, higher-quality goods and services, and often lower prices.

New businesses have another benefit: they create jobs. Robert Litan and Carl Schramm write in their recent book, Better Capitalism, that the formation and growth of scalable firms has driven U.S. job growth over the past several decades.<sup>76</sup>

The Kauffman Index of Entrepreneurial Activity tracks, on a monthly basis, the creation of new businesses in America. Every year since 1996, the first year the Kauffman Index was calculated, immigrants have outpaced native-born Americans in the rate of business startups. For the year 2015, the Kauffman Index shows that immigrants started new businesses at almost twice the rate of native-born Americans: 530 out of every 100,000 immigrants became a new business owner on average each month in 2015, compared to 290 new native-born business owners each month per 100,000 population. Furthermore, the Kauffman Index finds that immigrants accounted for approximately 27.5 percent of all new entrepreneurs in 2015, up from just 13.3 percent of all new entrepreneurs in 1996.<sup>77</sup>

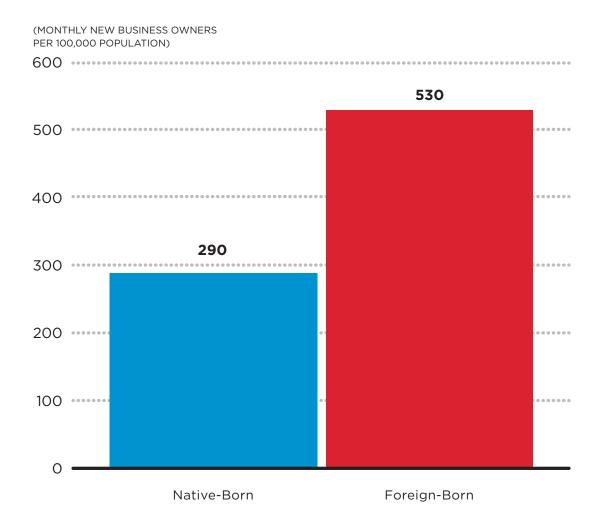
It should be noted that while immigrants start businesses at a faster rate than natives, immigrantfounded businesses also fail at a higher rate. That said, among firms that do survive, immigrant-founded firms tend to experience faster employment growth in

<sup>76</sup> Robert E. Litan and Carl J. Schramm, Better Capitalism: Renewing the Entrepreneurial Strength of the American Economy (New Haven, CT: Yale University Press, 2012).

<sup>77</sup> Fairlie, Robert W., E.J. Reedy, Arnobio Morelix, and Joshua Russell. The Kauffman Index: 2016 Startup Activity. Ewing Marion Kauffman Foundation, Aug. 2016. http://www.kauffman.org/-/media/kauffman\_org/microsites/kauffman\_index/startup\_activity\_2016/kauffman\_index\_startup\_activity\_ national\_trends\_2016.pdf.

the years following firm establishment.<sup>78</sup> Since it is difficult to know which businesses will succeed, a high rate of business startup is healthy for a dynamic economy.

#### Number of New Business Owners Each Month per 100,000 Population, Foreign-Born and Native-Born, 2015



Source: Fairlie, et. al., 2016.

<sup>78</sup> Sari Pekkala Kerr and William R. Kerr. *Immigrant Entrepreneurship*. Working paper no. 22385. Cambridge: National Bureau of Economic Research, 2016.

#### Immigrants own a disproportionate share of small businesses in the U.S.

**Significant Fact: Immigrants** account for 18% of business owners in the **U.S.** and more than 28% of "Main Street"

business owners.

Immigrants account for an important share of America's business owners. In fact, according to the Fiscal Policy Institute, some 900,000 immigrants own businesses in the U.S., meaning roughly 18 percent of all business owners are foreign-born.<sup>79</sup>, 80 That's especially impressive when one considers that immigrants account for 13.5 percent of the U.S. population and around 16.8 percent of the labor force.

Even more remarkable is the outsized role immigrants play in what the Fiscal Policy Institute terms "Main Street" businesses. "Main Street" businesses are the enterprises that give communities their distinctive charm and vitality: neighborhood grocery stores, florists, restaurants, hotels, barbershops, nail salons, and the like.

Immigrants account for 28 percent of the owners of "Main Street" businesses overall. And they make up 61 percent of gas station owners, 58 percent of dry cleaners owners, 53 percent of grocery store owners, 45 percent of nail salon owners, and 38 percent of restaurant owners. Of special note: immigrants from Asian countries represent nearly half of all immigrant "Main Street" business owners.

The small-business entrepreneurship of immigrants has a positive impact on the economy. In 2013,81 immigrant business owners had earnings of \$65 billion, and the sub-group of "Main Street" business owners had earnings of \$13 billion.82

<sup>79</sup> David Dyssegaard Kallick, Bringing Vitality to Main Street: How Immigrant Small Businesses Help Local Economies Grow, Rep., Fiscal Policy Institute and Americas Society, Jan. 2015, http://fiscalpolicy.org/wp-content/uploads/2015/01/Bringing-Vitality-to-Main-Street.pdf.

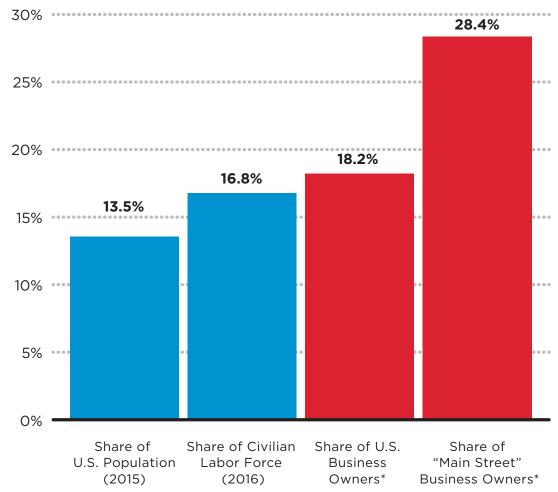
<sup>80</sup> Note: "Business owners" are defined by this study as "people who own an incorporated business-not publicly traded corporations-and whose fulltime job is to run that business."

<sup>81</sup> Data are from the 2013 American Community Survey, five-year data set.

<sup>82</sup> David Dyssegaard Kallick, Bringing Vitality to Main Street: How Immigrant Small Businesses Help Local Economies Grow, Rep., Fiscal Policy Institute and Americas Society, Jan. 2015, http://fiscalpolicy.org/wp-content/ uploads/2015/01/Bringing-Vitality-to-Main-Street.pdf.



## Foreign-Born Share of Business Owners Compared to their Share of the U.S. Population and Civilian Labor Force



<sup>\*</sup>Data from Kallick (2015) are from the 2013 American Community Survey, five-year data set.

Source: Kallick, 2015.

### Immigrants with a college degree are almost twice as likely to be small business owners.

**Significant Fact:** In 2010, 5.4% of immigrants with a college degree owned a small business, compared to 2.8% of immigrants without a college degree.

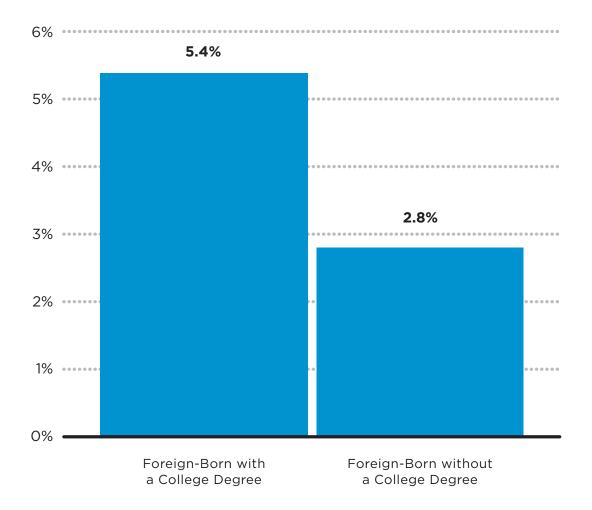
As previously shown, the educational attainment of recent immigrants to the U.S. has improved markedly compared to immigrants who came to the U.S. in earlier decades.

Improved educational attainment translates into many positive outcomes, including the increased likelihood of owning a small business. Research by David Kallick (2012) finds that 2.8 percent of immigrants without college degrees reported owning a small business in 2010. Meanwhile, 5.4 percent of immigrants with college degrees said they owned a small business. Put differently, immigrants who complete college are almost twice as likely to own a small business compared to immigrants without a college degree.83 As more and more immigrants earn college degrees, the incidence of small business ownership in America is likely to increase.

<sup>83</sup> David D. Kallick, Immigrant Small Business Owners: A Significant and Growing Part of the Economy, report (Fiscal Policy Institute, 2012), http:// fiscalpolicy.org/wp-content/uploads/2012/06/immigrant-small-businessowners-FPI-20120614.pdf.



#### Percentage of Foreign-Born Who Own a Small Business, by Education Level, 2010



Source: Kallick, 2012.

#### Immigrants are helping fuel the growth of U.S. businesses.

**Significant Fact: Immigrant** business owners accounted for nearly half of the growth in business ownership in the U.S. between 2000 and 2013.

Over the years from 2000 to 2013, business ownership in the U.S. increased by approximately 770,000. The number of immigrant business owners increased by 370,000, accounting for almost half of the total growth.84

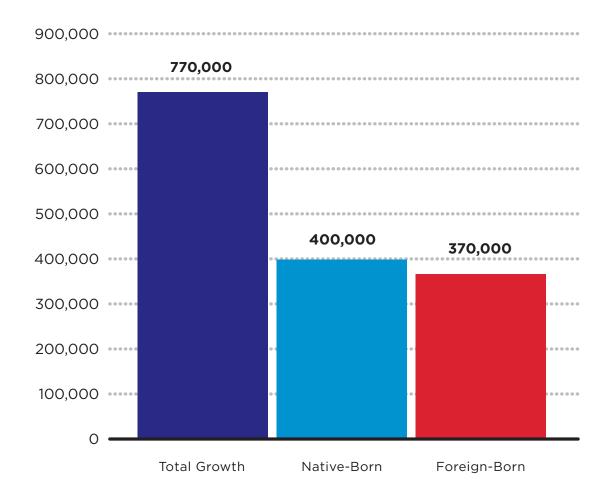
It is also worth noting that immigrants are more likely to start a small business after they have been in the country for several years. Kallick (2012) finds that immigrants who have lived in the U.S. for over 10 years "are more than twice as likely to be small business owners" compared with immigrants who have been in the U.S. for 10 or fewer years.<sup>85</sup> This finding is important because the number of immigrants in the U.S. increased substantially over the past two decades. Since many of these immigrants have now been in the country for more than 10 years, we might expect immigrant small-business ownership to further increase in coming years.

<sup>84</sup> David Dyssegaard Kallick, Bringing Vitality to Main Street: How Immigrant Small Businesses Help Local Economies Grow, Rep., Fiscal Policy Institute and Americas Society, Jan. 2015, http://fiscalpolicy.org/wp-content/ uploads/2015/01/Bringing-Vitality-to-Main-Street.pdf.

<sup>85</sup> David D. Kallick, Immigrant Small Business Owners: A Significant and Growing Part of the Economy, report (Washington, D.C.: Fiscal Policy Institute, 2012), http://fiscalpolicy.org/wp-content/uploads/2012/06/ immigrant-small-business-owners-FPI-20120614.pdf.



Growth in U.S. Business Ownership, Foreign-Born and Native-Born, 2000-2013



Source: Kallick, 2015.

#### **Many immigrant-owned** businesses provide jobs for other workers.

Significant Fact: **Many immigrant**owned small businesses employ more than just the business owner. In fact. immigrant-owned businesses with employees have an average of 11 employees.

The average number of employees working for a small business is a good indicator of the importance of immigrant small businesses to the economy. After all, there is a big difference between a firm with only one employee and a firm with several employees.

David Kallick (2012) finds that 57 percent of immigrant-owned small businesses "have at least one paid employee in addition to the owner," the same percentage as small businesses owned by native-born citizens. 86 This suggests that the majority of immigrants' firms, like natives', are more than a single man or woman shop.

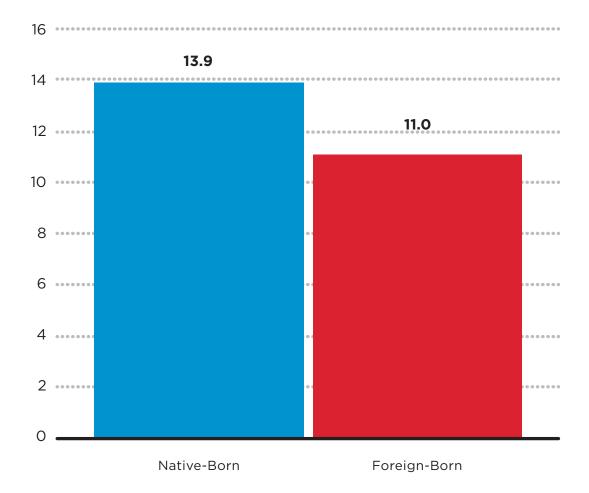
Indeed, among immigrant-owned businesses that hire employees, the average number of employees is 11.87 While this is fewer than the average for native-owned businesses, it remains clear that immigrant-owned businesses help provide jobs for more than just the business owner himself or herself.

87 Ibid.

<sup>86</sup> David D. Kallick, Immigrant Small Business Owners: A Significant and Growing Part of the Economy, report (Washington, DC: Fiscal Policy Institute, 2012), http://fiscalpolicy.org/wp-content/uploads/2012/06/ immigrant-small-business-owners-FPI-20120614.pdf.



#### Average Number of Employees among Foreign-Born and Native-Born Owned Businesses with Employees, 2005\*



Source: Kallick, 2012.

<sup>\*</sup>Note: Data on the average number of employees as found in Kallick, 2012, come from the Current Population Survey Contingent Work Supplement, 2005.

# Immigrants disproportionately start successful engineering and technology firms.

Significant Fact: **Immigrants** played a major role in starting some 44% of all new major Silicon Valley-based technology and engineering firms between 2006 and 2012.

Immigrants have been especially important in developing many of the most innovative engineering and technology firms that are propelling America's economy forward in the 21st century.

Vivek Wadhwa and a team of researchers found that between 2006 and 2012, approximately 107,800 major engineering and technology companies were formed in the U.S. To qualify as a "major" firm, the company had to have at least \$1 million in sales and 20 employees by 2012. The researchers estimate that more than 26,000 of these firms — the equivalent of 24.3 percent of the total — had at least one immigrant as a key founder. Even more impressive, during this same time, 43.9 percent of all major engineering and technology firms started in Silicon Valley had an immigrant as a key founder. The researchers estimate that collectively these immigrant-founded companies nationwide generated more than \$63 billion in sales in 2012 and employed some 560,000 workers.88

Wadhwa and his colleagues caution that, compared to earlier years, immigrants are slightly less likely now to have founded top engineering and technology companies. The researchers found in a previous analysis that during the period 1995–2005, immigrants started 25.3 percent of all new major engineering and technology firms nationwide and 52.4 percent of such firms in Silicon Valley.89

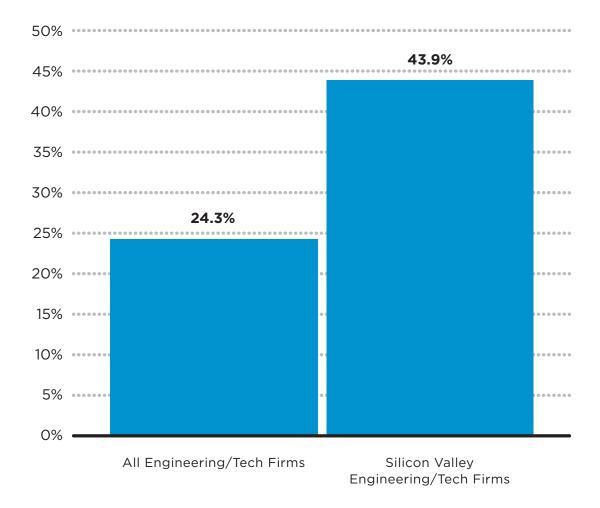
Although the national figure is only one percentage point lower for the more recent period, and indeed falls within the researchers' margin of error, the data suggest that the rapid growth trend in immigrantfounded engineering and technology firms has

<sup>88</sup> Vivek Wadhwa, AnnaLee Saxenian, and F. Daniel Siciliano, Then and Now: America's New Immigrant Entrepreneurs, Part VII, report (Ewing Marion Kauffman Foundation, 2012), http://www.kauffman.org/~/media/ kauffman\_org/research%20reports%20and%20covers/2012/10/then\_and\_ now\_americas\_new\_immigrant\_entrepreneurs.pdf.

<sup>89</sup> Vivek Wadhwa et al., America's New Immigrant Entrepreneurs: Part I, report (2007), http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=990152.

plateaued. For the U.S. to remain competitive in leading industries like engineering and technology, policies should encourage immigration to the U.S. for those who seek to work, innovate, and start new companies.

### Percentage of All Major U.S. Engineering and Technology Companies Founded by Immigrants in 2006-12



Source: Vivek Wadhwa et al., Then and Now: America's New Immigrant Entrepreneurs, Part VII.

# Immigrants have founded an increasing share of all venture-backed, public firms.

**Significant Fact:** By 2013, all of the immigrantfounded companies with venture backing that had ever gone public had total market capitalization of \$900 billion.

Most venture-backed firms are not publicly traded. In fact, over the period 2006–12, only around 280 firms that were venture-backed became publicly traded.

Of those, 92, the equivalent of approximately 33 percent, were founded by immigrants. This is a highly disproportionate share compared to immigrants' share of the U.S. population. Perhaps even more remarkable, though, is the strong increase in the share of such firms that immigrants have started. Prior to 1980, only 7 percent of these firms were started by immigrants. Over the next decade, from 1980 to 1989, the immigrantfounded proportion grew to 20 percent of the total.

The impact of these companies is immense. In 2012, immigrant-founded firms that had gone public after 2006 collectively employed 65,450 people and had annual sales of \$17 billion. All of the immigrantfounded companies with venture backing that have ever gone public had total market capitalization of \$900 billion in 2013. That level of capitalization would make these firms the 16th most valuable exchange in the world if they were their own country, outperforming the exchanges of countries like Russia, South Africa, and Taiwan.<sup>90</sup>

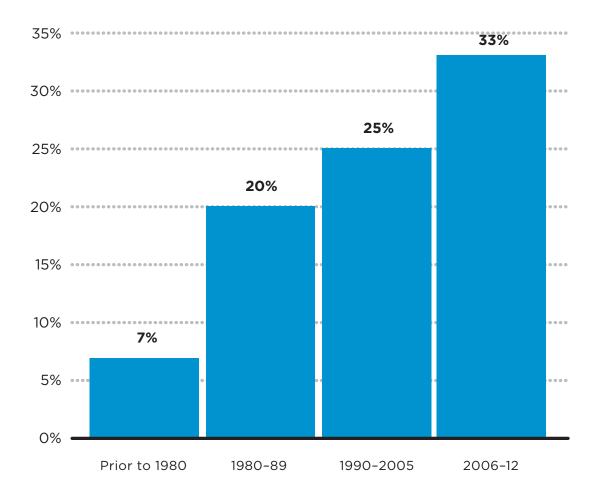
As of 2016, there were 87 privately held firms valued at least \$1 billion that had received venture funding but had not yet become publicly traded. More than half of these firms, or 44 of the 87, had at least one immigrant among the company's founders. One such firm is SpaceX, the company of Elon Musk, who was born in South Africa. These immigrant-founded firms employ an average of 760 employees, and have a collective value of \$168 billion.91

<sup>90</sup> Stuart Anderson, American Made 2.0: How Immigrant Entrepreneurs Continue to Contribute to the U.S. Economy, report (National Venture Capital Association, 2013).

Stuart Anderson, Immigrants and Billion Dollar Startups, report (National Foundation for American Policy, Mar. 2016), http://nfap.com/wp-content/ uploads/2016/03/Immigrants-and-Billion-Dollar-Startups.NFAP-Policy-Brief.March-2016.pdf.



#### Percentage of Venture-Backed, Publicly Traded Firms Founded by the Foreign-Born



Source: Anderson, 2013.

# **Immigrants have founded** many of the 'Fortune 500' companies.

Significant Fact: **Immigrants and** the children of immigrants played a major role in founding more than 40% of the 2016 "Fortune 500" companies. These firms had total revenues of \$4.8 trillion and employed 18.9

million workers in

2015.

A study from the Partnership for a New American Economy (2011) found that 18 percent of all of the "Fortune 500" companies in 2010 had at least one founder who was an immigrant. In addition, 22.8 percent of these firms had at least one founder who was a second-generation American (i.e., the child of an immigrant to the U.S.). Combined, these companies represented 40.8 percent of all "Fortune 500" companies in 2010. Examples of such firms include AT&T, Verizon, Pfizer, Kraft, DuPont, Google, Yahoo!, and eBay.92

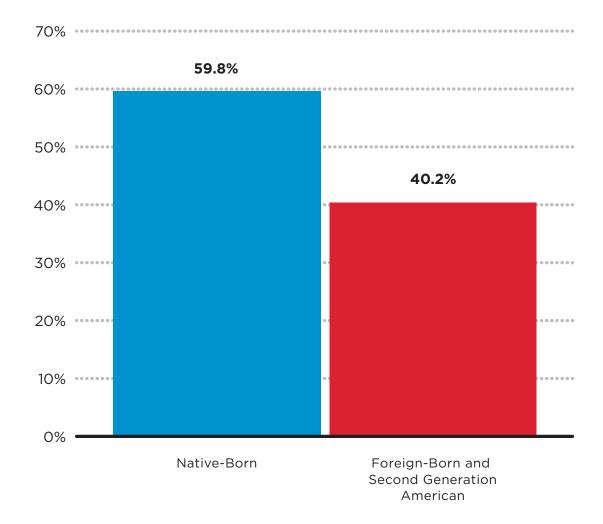
The Partnership for a New American Economy recently updated its analysis using the 2016 "Fortune 500" list. Although some of the firms on the "Fortune 500" changed between 2010 and 2016, the presence of immigrants and second-generation Americans among the ranks of company founders remained consistently strong. Indeed, immigrants and the children of immigrants played a major role in founding 201 of the 500 firms on the 2016 list, the equivalent of 40.2 percent. Collectively, these 201 companies had total revenue of \$4.8 trillion and employed 18.9 million workers globally in fiscal year 2015.93

<sup>92</sup> *The "New American" Fortune 500*, report (Partnership for a New American Economy, 2011), http://www.renewoureconomy.org/sites/all/themes/pnae/ img/new-american-fortune-500-june-2011.pdf.

<sup>93</sup> Reason for Reform: Entrepreneurship, report (Partnership for a New American Economy, Oct. 2016), http://www.newamericaneconomy.org/wpcontent/uploads/2016/12/Entrepreneur.pdf.



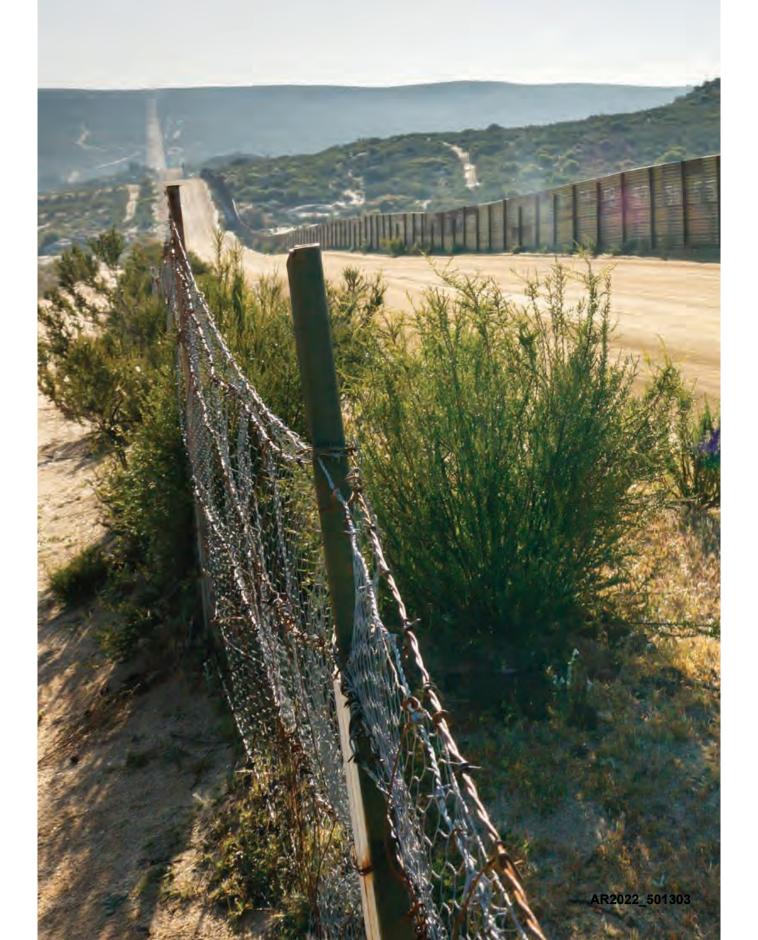
Percentage of "Fortune 500" Companies Founded by Native-Born Citizens, the Foreign-Born, and Second-Generation Americans, 2016



Source: Partnership for a New American Economy, 2016.

Note: For firms with multiple founders, the firm was classified as "immigrant-founded" or as having been founded by a second-generation American if at least one key founder of the firm was, respectively, an immigrant or a second-generation American (i.e., the child of an immigrant).

# Chapter 3: The Challenges of Immigration



# Millions of unauthorized immigrants live in the U.S. ...

Significant Fact:
An estimated
11.0 million
unauthorized
immigrants lived
in the U.S. in
2015.

A main concern many Americans have about immigrants is that too many live in the country illegally. 94 This worry is not unfounded.

The Department of Homeland Security estimates that in 2012 some 11.4 million unauthorized immigrants were living in the U.S. <sup>95</sup> Estimates from the Pew Research Center suggest this number has remained relatively stable in recent years, with 11.2 million unauthorized immigrants living in the U.S. in 2013, 11.1 million in 2014, <sup>96</sup> and 11.0 million in 2015. <sup>97</sup>

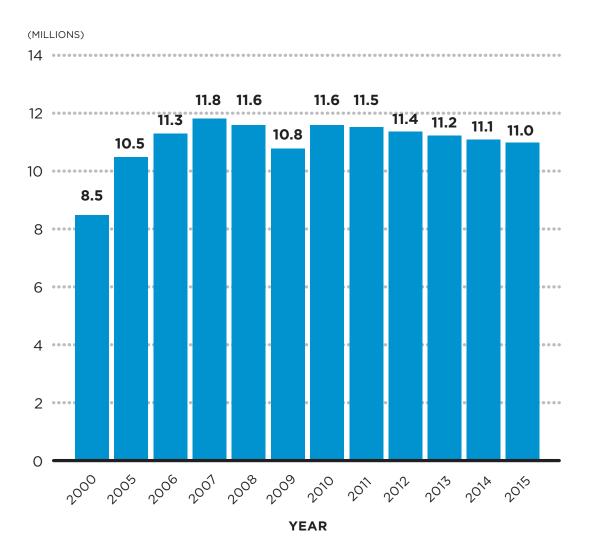
These figures are fairly consistent with data for the past half-decade, which range from a low of 10.5 million unauthorized immigrants in 2005 to a high of 11.8 million in 2007. Although the unauthorized population has remained fairly stable in recent years, it should be noted that the number of unauthorized immigrants is significantly larger today compared to the estimated 8.5 million unauthorized immigrants who lived in the U.S. in the year 2000.<sup>98</sup>

Unauthorized immigration is problematic because it erodes respect for the rule of law and undermines America's immigration system. It is not optimal from an economic standpoint either. To maximize the growth potential of any economy, it is best to have workers performing the tasks for which they are best suited. For example, a computer programmer should work with computers, a bricklayer should lay bricks, and a teacher

- 94 Immigrants can be classified as "unauthorized" or "illegal" for three main reasons: entering the country without obtaining the permission of the U.S. government, overstaying the length of approved time granted by their visa or green card, or violating the conditions of entry to the U.S., such as being employed without having the appropriate visa or green card.
- 95 U.S. Department of Homeland Security, Office of Immigration Statistics, Estimates of the Unauthorized Immigrant Population Residing in the United States: January 2012, by Bryan Baker and Nancy Rytina (2013), http://www.dhs.gov/sites/default/files/publications/ois\_ill\_pe\_2012\_2.pdf.
- 96 Jeffrey S. Passel and D'Vera Cohn. *Overall Number of U.S. Unauthorized Immigrants Holds Steady Since 2009*. Report. Washington, D.C.: Pew Research Center, 2016.
- 97 Gustavo Lopez and Kristen Bialik, *Key Findings about U.S. Immigrants*, Rep., Pew Research Center, 3 May 2017, http://www.pewresearch.org/fact-tank/2017/05/03/key-findings-about-u-s-immigrants/.
- 98 U.S. Department of Homeland Security, Office of Immigration Statistics, Estimates of the Unauthorized Immigrant Population Residing in the United States: January 2012, by Bryan Baker and Nancy Rytina (2013), http://www.dhs.gov/sites/default/files/publications/ois\_ill\_pe\_2012\_2.pdf.

should work with students. However, when immigrants are unauthorized, they have fewer employment options and often must take whatever job can be found even if it does not best suit their skills. This restrained labor mobility harms the overall efficiency of the economy and keeps economic growth from being as strong as it otherwise could be.

#### Number of Unauthorized Immigrants Residing in the U.S., 2000-15



Source: Data for 2000-2012: U.S. Department of Homeland Security, 2013; Data for 2013-15: Pew Research Center

# ... Though, lately unauthorized immigration has slowed.

Significant Fact:

Most illegal

immigrants in the

U.S. today came

to the country in

previous decades.

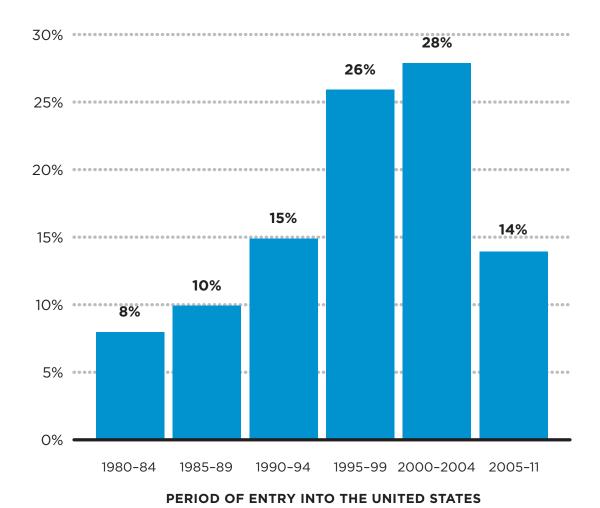
Though some 11 million immigrants live in the U.S. illegally, data show that the unauthorized immigrant population has not increased significantly in recent years. The Department of Homeland Security estimates that of the total unauthorized immigrant population in January 2012, only 14 percent entered the U.S. during the past six years (2005–11). Meanwhile, more than half of those in the U.S. illegally originally came during the decade 1995–2004. The remaining 32 percent of the unauthorized immigrant population arrived in the U.S. prior to 1994.<sup>99</sup>

The majority of immigrants living in the U.S. are in the country legally. In 2015, the total immigrant population in the U.S. was around 43.3 million, meaning that unauthorized immigrants accounted for around 25.6 percent of the total. While this is still a large percentage, it is important to note that current U.S. immigration laws provide few options for immigrants to enter the country to work. Policy reform that increases the number of work-based visas and green cards could help the economy and curb unauthorized immigration by providing ways for immigrants to come to the U.S. to fill open jobs.

<sup>99</sup> U.S. Department of Homeland Security, Office of Immigration Statistics, Estimates of the Unauthorized Immigrant Population Residing in the United States: January 2012, by Bryan Baker and Nancy Rytina (2013), http://www.dhs.gov/sites/default/files/publications/ois\_ill\_pe\_2012\_2.pdf.



#### Percentage of the Total 2012 Unauthorized Foreign-Born Population That Entered the U.S. During Each Period



Source: U.S. Department of Homeland Security, 2013.

#### **Border enforcement costs** taxpayers billions ...

Significant Fact: The budget of the U.S. Border Patrol has grown substantially over the past decade and now exceeds \$3.6 billion per year.

The U.S. Border Patrol is a law enforcement agency within U.S. Customs and Border Protection that is charged with monitoring and protecting the U.S. borders.

U.S. Border Patrol is also responsible for monitoring unauthorized immigrant activity within the U.S. According to Border Patrol's website, the agency monitors 6,000 miles of land terrain along the U.S.-Mexico border and the U.S.-Canada border. The agency also monitors approximately 2,000 miles of coastal border along the Florida peninsula and Puerto Rico. 100

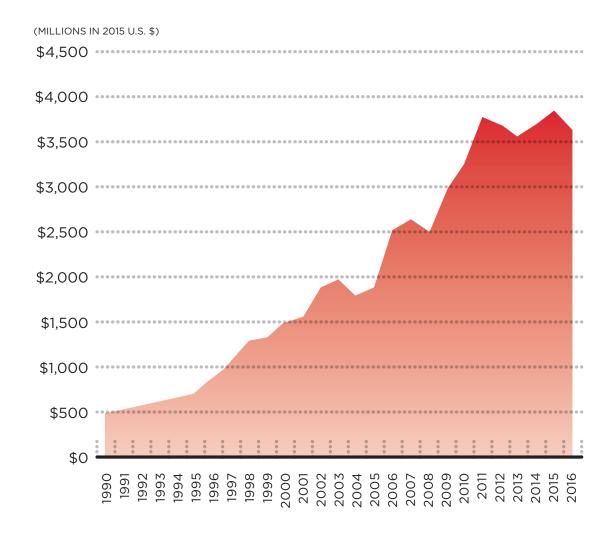
While protecting America's borders is important, Americans are understandably concerned with the associated costs. In fiscal year 2016, the enacted budget of the U.S. Border Patrol was over \$3.6 billion. The agency's budget has increased substantially over the past 20 years, especially since the September 11, 2001, attacks. In 1990, the budget was \$482 million (in 2015 dollars). Ten years later, one year before the September 11 attacks, the budget was just under \$1.5 billion, but grew to over \$2.5 billion by 2006 and peaked at \$3.85 billion in 2015. 101

<sup>100</sup> U.S. Department of Homeland Security, U.S. Customs and Border Protection, Border Patrol Overview, http://www.cbp.gov/border-security/ along-us-borders/overview.

<sup>101</sup> U.S. Department of Homeland Security, U.S. Customs and Border Protection, Enacted Border Patrol Program Budget by Fiscal Year, https:// www.cbp.gov/sites/default/files/assets/documents/2016-Oct/BP%20 Budget%20History%201990-2016.pdf.



#### Enacted Budget of the U.S. Border Patrol, Fiscal Years 1990-2016



Source: U.S. Department of Homeland Security, U.S. Customs and Border Protection, *Enacted Border Patrol Program Budget by Fiscal Year.* 

Note: Data are reported as 2015 U.S. dollars, and were adjusted by the author using the Consumer Price Index.

# ... And the number of border patrol agents is near an all-time high.

Significant Fact:
In 2016, the
Border Patrol
had nearly
20,000 agents
on staff, more
than twice
the number of
agents on staff
in 2001.

The U.S. Border Patrol was founded in 1924 and employed a handful of agents who patrolled the Mexican and Canadian borders. The staffing of the Border Patrol has grown dramatically, especially in recent years.

According to official statistics, in 1992, the Border Patrol employed 4,139 agents. The number of agents reached above 10,000 for the first time in 2002. Border Patrol staffing grew especially rapidly beginning in 2005. Between 2005 and 2011, the number of agents almost doubled, peaking at 21,444 in 2011. Since 2011, the number of Border Patrol agents has fallen each year. In 2016, there were some 19,828 agents on staff, and more than 85 percent of those agents were stationed on the Southwest border. Although current staffing levels are the lowest they have been since 2008, it is worth noting that the number of agents currently employed is still more than twice the number of agents employed in 2001.

Interestingly, from 2005 to 2016, a period when the number of border patrol agents increased substantially, the number of unauthorized immigrant apprehensions decreased. In 2005, 1.19 million unauthorized immigrants were apprehended. That number decreased every year until 2011, when 340,252 unauthorized immigrants were apprehended. The number of apprehensions increased to 415,816 in 2016. Even so, apprehensions in 2016 were well below the number of annual apprehensions in the mid-2000s. 103

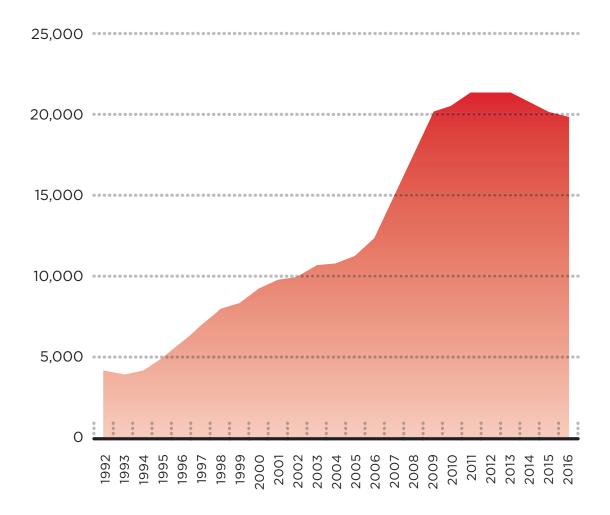
There are many reasons for this downward trend. The increased number of border patrol agents likely had some deterrent effect, discouraging would-be unauthorized immigrants from attempting to cross

<sup>102</sup> U.S. Department of Homeland Security, U.S. Customs and Border Protection, Border Patrol Agent Staffing by Fiscal Year, https://www.cbp.gov/sites/default/files/assets/documents/2016-Oct/BP%20Staffing%20 FY1992-FY2016.pdf.

<sup>103</sup> U.S. Department of Homeland Security, U.S. Customs and Border Protection, U.S. Border Patrol Monthly Apprehensions (FY 2000 - FY 2016). https://www.cbp.gov/sites/default/files/assets/documents/2016-Oct/BP%20Total%20Monthly%20Apps%20by%20Sector%20and%20 Area%2C%20FY2000-FY2016.pdfappre.

the border in the first place. However, the overall decrease in migration from Mexico during the latter half of the 2000s is likely the strongest reason for the decline in apprehensions of unauthorized immigrants. Whether further investment in border security is prudent will no doubt remain an issue of contentious debate.

Number of U.S. Border Patrol Agent Staff Members, Fiscal Years 1992–2016



Source: U.S. Department of Homeland Security, U.S. Customs and Border Protection, *Border Patrol Agent Staffing by Fiscal Year.* 

#### **Hundreds die each year trying to** cross the Southwest border.

**Significant Fact:** 

The extreme conditions along remote areas of the Southwest border can make unauthorized border crossing very dangerous.

One major problem of unauthorized immigration is that attempting to cross the border can be very dangerous.

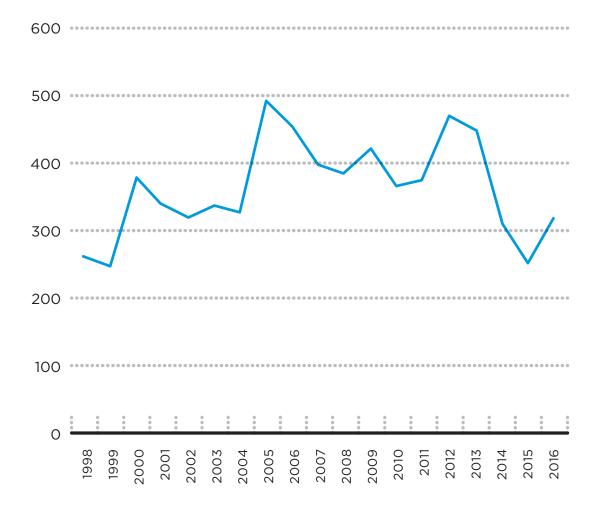
Unauthorized immigrants often attempt to cross the U.S. border in remote areas to evade detection. But the trek through America's remote Southwest deserts is dangerous and can prove fatal.

Data from the U.S. Border Patrol indicate that since 1998, some 6,915 deaths, or an average of 364 per year, were reported along the Southwest border. In 2013 there were some 471 deaths reported. Thankfully, that number has decreased somewhat in recent years. Even so, it is tragic to know 322 people died along the Southwest border in 2016.<sup>104</sup>

104 U.S. Department of Homeland Security, U.S. Customs and Border Protection, Southwest Border Deaths by Fiscal Year, https://www.cbp.gov/sites/default/files/assets/documents/2016-Oct/BP%20Southwest%20 Border%20Sector%20Deaths%20FY1998%20-%20FY2016.pdf.



#### Number of Deaths Recorded at the U.S. Southwest Border, Fiscal Years 1998–2016



Source: U.S. Department of Homeland Security, U.S. Customs and Border Protection, Southwest Border Deaths by Fiscal Year.

# Many immigrants have a low level of education ...

Significant Fact:
The proportion
of immigrants
who lack a high
school degree
has shrunk.

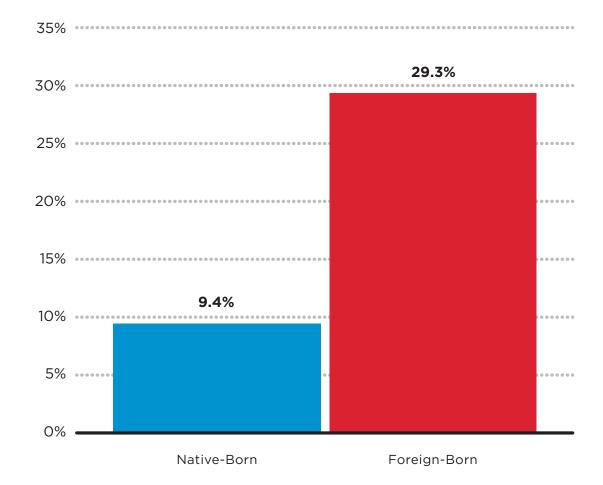
Obtaining higher levels of education is one way people increase their skill levels and in turn contribute more to the economy. Unfortunately, a large share of the U.S. immigrant population has not earned even a high school degree. In 2015, nearly 30 percent of immigrants lacked a high school degree, compared to fewer than 10 percent of native-born Americans.<sup>105</sup>

The good news is that more recent immigrants to the U.S. have higher average levels of education compared to the waves of immigrants who came in the past. Approximately 30.7 percent of immigrants who arrived in the U.S. between 2000 and 2009 lacked a high school degree in 2015. Yet, among immigrants who arrived in the U.S. since 2010, a much smaller percentage, 20.3 percent, lacked a high school degree in 2015. While this is still a troublingly high percentage, the improving educational attainment of immigrants is substantial and a reason for optimism.

105 U.S. Census Bureau, 2015 American Community Survey. 106 Ibid.



#### Percentage of People Who Have Not Earned a High School Degree, 2015, Foreign-Born vs. Native-Born



Source: U.S. Census Bureau, 2015 American Community Survey.

Note: Data are for the population 25 years of age and older who have not earned a high school diploma (or an equivalent degree such as a GED).

# ... But lesser-educated immigrants are an essential workforce.

Significant Fact:
The majority of
jobs in the U.S.
do not require a
college degree,
and lesser-skilled
immigrants help
fill these jobs.

The American economy requires workers of all skill types.

No doubt a highly educated workforce is increasingly necessary in today's globally competitive economy. But lesser-educated workers remain essential as well. In fact, in 2014 less than 40 percent of workers age 25 and older possessed a bachelor's or advanced degree. Furthermore, as the chart on the next page shows, data suggest that positions that do not require any formal educational credential or at most a high school degree will experience similar total job growth over the next decade compared to positions that require a bachelor's degree or higher. Occupations expected to have the greatest number of job openings over the next decade include office and administrative support and food preparation and serving. 108

In 1970, just over one in 10 Americans had a bachelor's degree. Fast forward to 2015: the same was true of almost one in three Americans. As native-born Americans have gained higher levels of education, they have been less likely to fill lower-paying blue-collar jobs.

Immigrants with lower levels of education therefore play an important role in the U.S. economy. Jobs like truck driver, food service worker, or landscaper require considerable physical stamina and are more likely to be filled by an immigrant. Madeline Zavodny and Tamar Jacoby find that overall, when compared to similarly educated natives, "immigrants spend on average 13 percent more time climbing ladders, scaffolds or poles and working in high places. They spend 12 percent more time kneeling, crouching or crawling. Their jobs involve 10 percent more exposure to hazardous conditions, 7 percent more exposure to

<sup>107</sup> Author's calculations. Data from "Employment, wages, and projected change in employment by typical entry-level education," Employment Projections Program, U.S. Bureau of Labor Statistics.

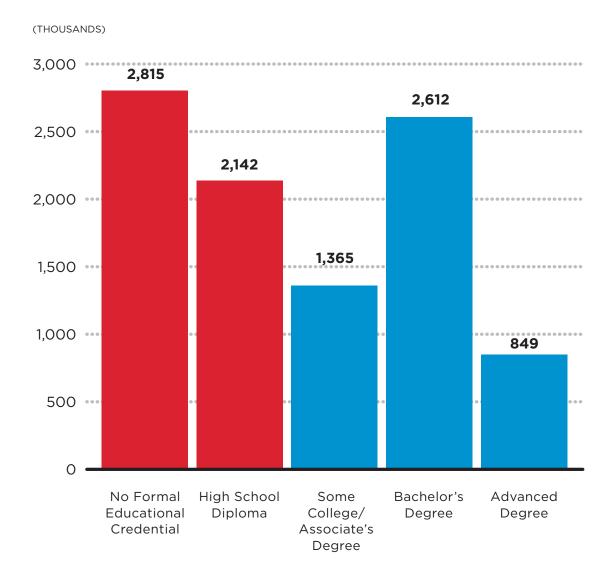
<sup>108 &</sup>quot;Employment change, replacement needs, and job openings projected 2014-24," Employment Projections Program, U.S. Bureau of Labor Statistics.

<sup>109</sup> U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics* (2015), Table 104.10, accessed April 13, 2017, https://nces.ed.gov/programs/digest/d15/tables/dt15\_104.10.asp.

contaminants and 6 percent more use of hazardous equipment."110

To be sure, gaining more education is important for immigrants to grow their incomes and advance in America. But it is false to believe that less-educated immigrants do not play an important role already. Indeed, immigrants prove an essential workforce, working alongside natives to help power the American economy forward.

# Number of New Jobs to be Created in the U.S., by Typical Educational Requirement, Projected 2014–24



Source: Author's calculations. Data from Employment Projections Program, U.S. Bureau of Labor Statistics.

<sup>110</sup> Madeline Zavodny and Tamar Jacoby, *Filling the Gap: Less-Skilled Immigration in a Changing Economy*, report (Washington: American Enterprise Institute, 2013), http://www.aei.org/files/2013/06/10/-zavodny-filling-the-gap-immigration-report\_140631709214.pdf.

# Do immigrants take jobs from the native-born and lower their wages?

Many Americans fear that immigrants represent competition for jobs. "They're taking our jobs" is a common refrain in the immigration debate. But is there much truth to this claim?

By and large, the answer is "no." Rather than compete with native workers, immigrants most often complement them. The reason is that immigrants and natives bring different skills to the labor force. Native-born U.S. citizens tend toward occupations that reward things like their educational training, fluency in English, and familiarity with U.S. culture and informal norms. Immigrants, meanwhile, find work in other areas. High-skilled immigrants often fill jobs that require specialized skills, while lesser-skilled immigrants fill jobs that prioritize physical exertion relative to communication skills. This delineation of work is economically efficient — after all, specialization within labor markets helps to boost economic growth.

The very jobs natives and immigrants hold suggest that labor-market competition between the two groups is not all that common. First of all, immigrants are more likely to be in the lesser-skilled end of the workforce than natives. But even within the same skill groups, natives and immigrants gravitate toward different jobs.

In the high-skilled sector, natives are more likely to fill managerial, sales, or professional service roles. Immigrants meanwhile contribute largely in more technical and scientific job roles.

In America's lesser-skilled workforce, there is more competition between natives and immigrants. But even there, competition is not great because natives and immigrants focus on different job tasks. A good example is agricultural labor. Farm managers are often natives, while immigrants fill more physically taxing jobs like crop picker.

A more precise way to determine how much natives and immigrants compete in the labor market is to analyze the effect of immigrants on natives' wages. Does an increase of immigrants working in a particular labor market reduce the wages of existing workers? Or raise them?

Economic theory suggests that either effect could be possible. If immigrants make the wider economy, and even native workers themselves, more productive, then one would expect to see rising wages for natives. Yet counteracting this is the increase in the supply of labor, which, all else being



equal, would reduce wages. Furthermore, if immigrants simply compete with natives for the same jobs, this competition would make downward pressure on wages even stronger.

Many rigorous studies using different estimation techniques and different data sets have attempted to provide clarity to the wage question. Taken as a whole, these studies find immigration has a very small negative effect on natives' wages in the short term and virtually no impact in the long run. Furthermore, the effects vary based on worker skill level. The wages of lesser-skilled workers are more affected than the wages of high-skilled workers, though the impact remains small.

Harvard economist George Borjas finds the most negative wage effects from immigration. Examining the period 1960–2001 in the U.S., Borjas finds that increasing the number of immigrant workers by 10 percent within a particular skill group reduced wages by around 3 percent to 4 percent for natives in that same skill group.<sup>111</sup> In another study, Borjas and co-author Lawrence Katz find that in the U.S. during the period 1980–2000, immigrant inflows from Mexico reduced wages for U.S. natives without high school degrees by 8.2 percent in the short term and 4.2 percent in the long term. For typical natives, Borjas and Katz estimate that immigrant inflows from Mexico reduced wages 3.4 percent in the short term and had no effect at all in the long term.<sup>112</sup>

But another recent and highly cited study, by economists Gianmarco Ottaviano and Giovanni Peri, updates Borjas's methodology to account for the fact that immigrant and native workers are not perfect substitutes. After all, they have different skills, particularly language skills. When accounting for this, but otherwise using much the same methodology as Borjas and Katz, Ottaviano and Peri determine that between 1990 and 2006, immigrant inflows reduced wages for lesser-skilled natives 0.7 percent in the short term but increased them 0.3 percent in the long term. For the average native-born U.S. worker, the immigration inflow decreased wages 0.4 percent in the short term and increased them 0.6 percent in the long term. <sup>113</sup>

<sup>111</sup> George J. Borjas, "The Labor Demand Curve Is Downward Sloping: Reexamining the Impact of Immigration on the Labor Market," *The Quarterly Journal of Economics* 118, no. 4, doi:10.1162/003355303322552810.

<sup>112</sup> George J. Borjas and Lawrence F. Katz, "The Evolution of the Mexican-Born Workforce in the United States," in Mexican Immigration to the United States, ed. George J. Borjas (Chicago: University of Chicago Press, 2007), 13–56.

<sup>113</sup> Gianmarco I.P. Ottaviano and Giovanni Peri, Immigration and National Wages: Clarifying the Theory and the Empirics, working paper no. NBER Working Paper 14188 (Cambridge: National Bureau of Economic Research, 2008), http://www.nber.org/papers/w14188.pdf.

# Too many immigrants speak English poorly.

Significant Fact:
Learning English
is important for
many reasons,
and one primary
reason is that
immigrants
who learn
English enjoy
substantially
higher earnings.

Perhaps the most common complaint levied against immigrants is that too many of them do not speak English, or that they speak the language poorly. While many immigrants do in fact speak some English, data suggest that proficiency in English remains a significant problem for a large portion of immigrants. In 2015, nearly half of the U.S. foreign-born population reported speaking English less than "very well." For immigrants from Latin America, English proficiency is a problem for an even larger proportion.

As one would expect, immigrants improve their English-speaking proficiency the longer they live in the U.S. Among naturalized citizens, who tend to have spent more time in the U.S., 38.2 percent speak English less than "very well," compared to 59.5 percent of noncitizen immigrants. Furthermore, when surveyed in 2015, 46 percent of immigrants who had been in the U.S. for at least 15 years said they spoke English less than "very well." While this is still a large proportion, it is significantly better when one considers that 55.6 percent of the immigrants who entered the U.S. since 2010 spoke English less than "very well."

Learning English is important for many reasons, but primarily because immigrants who learn English enjoy substantially higher earnings. One study finds that "English fluency boosts wages by 21 percent on average," even after controlling for other factors. 117 Furthermore, as much as half of the increase in wages that immigrants experience during their first two decades living in the U.S. is thanks to their improved proficiency in speaking English over that period. 118

<sup>114</sup> U.S. Census Bureau, 2015 American Community Survey.

<sup>115</sup> Ibid.

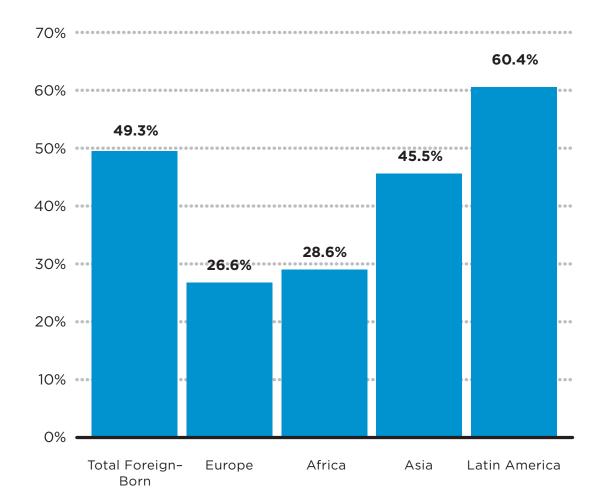
<sup>116</sup> Ibid

<sup>117</sup> Alex Nowrasteh, *The Fiscal Impact of Immigration*, working paper (Washington: Cato Institute, 2014), http://object.cato.org/sites/cato.org/files/pubs/pdf/working-paper-21-fix.pdf.

<sup>118</sup> George J. Borjas, *Heaven's Door: Immigration Policy and the American Economy* (Princeton, NJ: Princeton University Press, 2001).



# Percentage of the Foreign-Born Who Speak English Less Than "Very Well," by Region of Birth, 2015



Source: U.S. Census Bureau, 2015 American Community Survey.

# Many immigrants have not taken the step to naturalize and become U.S. citizens.

**Significant Fact:** Fewer than half of immigrants in the U.S. are naturalized citizens, and some 42% of immigrants who are eligible to naturalize have not done so.

To become a naturalized U.S. citizen, an immigrant

- Reside in the U.S. as a legal permanent resident for a minimum of five years
- Demonstrate competence in English and U.S. civics by passing the U.S. citizenship test
- Pay a fee, and participate in an official naturalization ceremony. 119

Examining naturalization rates is one way to measure the extent to which immigrants are broadly assimilating with the rest of American society. As shown in the chart, less than half of all immigrants in the U.S. were naturalized citizens in 2015. While America's naturalization rate has climbed some in recent years, it remains lower than it was during other periods in the nation's history. 120 America's naturalization rate is also low compared to other major developed countries such as Australia and Canada. 121

Of course many immigrants are not eligible to naturalize. Yet estimates suggest that some 42 percent of immigrants who are eligible to naturalize have not done so. When surveyed, immigrants overwhelmingly report that they desire to become U.S. citizens. A comprehensive study on immigrant integration by the National Academy of Sciences concludes: "moderate levels of naturalization in the United States appear to stem not from immigrants' lack of interest or even primarily from the bureaucratic process of applying

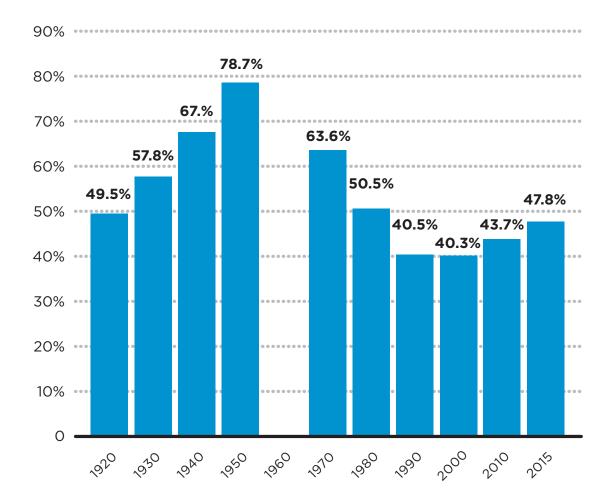
<sup>119</sup> Department of Homeland Security, U.S. Citizenship and Immigration Services, Naturalization Information, https://www.uscis.gov/citizenship/ teachers/naturalization-information.

<sup>120</sup> U.S. Census Bureau, Historical Census Statistics on the Foreign-Born Population of the United States: 1850-2000, Table 12, "Citizenship Status of the Foreign-Born Population: 1890 to 1950 and 1970 to 2000, 2 Feb. 2006, https://www.census.gov/population/www/documentation/twps0081/ twps0081.html.

<sup>121</sup> Integration of Immigrants into American Society: Panel on the Integration of Immigrants into American Society, Ed. Mary C. Waters and Marisa Gerstein Pineau, Washington, D.C.: National Academies, 2015, 166.

for citizenship. Instead the obstacle to naturalization lies somewhere in the process by which individuals translate their motivation to naturalize into action."<sup>122</sup>

## Percentage of Foreign-Born People Who Are Naturalized Citizens



Source: Data for the years 1920 to 2000: U.S. Census Bureau, *Historical Census Statistics on the Foreign-Born Population of the United States*; Data for the years 2010 and 2015: U.S. Census Bureau, American Community Survey.

Note: Data are not available for they year 1960.

122 Ibid, p. 167.

# **Immigrants are more** likely to be in poverty.

Significant Fact: In 2015, more than one in six immigrants were living in poverty. However, immigrants who have been in the U.S. for a longer period of time are less likely to be in poverty.

Every year the U.S. federal government calculates the federal poverty threshold based on a formula that accounts for a household's family size and composition. In 2016, the poverty threshold for a family of four (a family with two parents and two children) was determined to be \$24,339.<sup>123</sup>

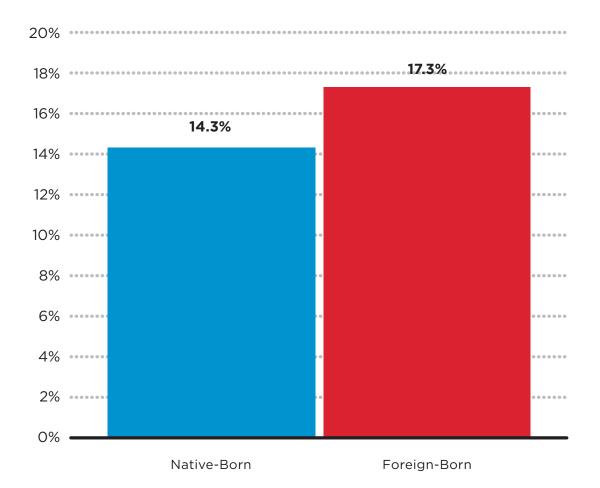
In 2015, 14.3 percent of native-born citizens were below the poverty level. Meanwhile, 17.3 percent of immigrants were considered to be living in poverty. 124 What's encouraging is that immigrants who have lived in the U.S. for several years are less likely to be living in poverty. In 2015, 13.7 percent of immigrants who came to the U.S. prior to 2000 were in poverty. While still high, this compares very favorably with the 19.7 percent of immigrants living in poverty who arrived in the U.S. between 2000 and 2009, and the 26.3 percent who arrived in the U.S. after 2009. 125

<sup>123</sup> The U.S. Census Bureau's publication of annual poverty thresholds is available at U.S. Census Bureau, Poverty Thresholds, 2016, https://www. census.gov/data/tables/time-series/demo/income-poverty/historicalpoverty-thresholds.html.

<sup>124</sup> U.S. Census Bureau, 2015 American Community Survey.



#### Percentage of People Living Below the Federal Poverty Level, 2015, Foreign-Born vs. Native-Born



Source: U.S. Census Bureau, 2015 American Community Survey.

## **Immigration can strain** government budgets ...

**Significant Fact: Many Americans** are weary of expanding immigration for fear that doing so would exacerbate the country's already significant fiscal problems.

According to the Congressional Budget Office (CBO), total outstanding federal debt currently stands around \$19.4 trillion, the equivalent of nearly \$60,000 per person in the U.S. 126 That's an amount at least \$2 trillion greater than the total annual output of the U.S. economy, suggesting America's debt level is increasingly burdensome relative to the resources available to pay it off.

Although immigrants contribute to the economy, many immigrants impose a net burden on government finances. Immigrants are not unique in this respect: As the chart on the next page shows, first-generation immigrants, second-generation Americans (i.e., the children of immigrants), and third-plus-generation Americans all have a negative fiscal impact. That is to say the average per capita receipts the government receives from each person, regardless of immigrant generation, are less than the government's average per capita expenditures.

Even so, first-generation immigrants have the most negative fiscal impact, with their tax payments on average equaling less than 70 percent of the amounts they received in government benefits in 2013. Meanwhile, the tax payments of second-generation Americans covered nearly 76 percent of the benefits they received, and the third-plus generations covered almost 80 percent of the benefits they received. 127

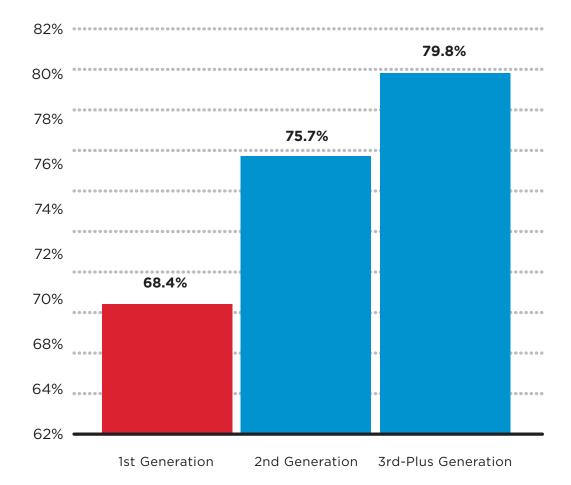
Many Americans are weary of expanding immigration for fear that doing so would exacerbate the country's already significant fiscal problems. In coming pages we will drill down a bit deeper to examine more closely the impact immigrants have on government budgets.

<sup>126</sup> Congressional Budget Office, An Update to the Budget and Economic Outlook: 2016 to 2026, Aug. 2016, https://www.cbo.gov/sites/default/ files/114th-congress-2015-2016/reports/51908-2016\_Outlook\_Update\_ OneCol.pdf.

<sup>127</sup> Francine D. Blau and Christopher Mackie, eds., The Economic and Fiscal Consequences of Immigration, Washington, D.C.: National Academies, 2016.



Ratio of Government Receipts to Outlays, Federal, State, and Local Levels of Government Combined, by Immigrant Generation, 2013



Source: Francine D. Blau and Christopher Mackie, eds., *The Economic and Fiscal Consequences of Immigration*, Washington, D.C.: National Academies, 2016.

Note: The fiscal impact of dependents of each generation are included in the estimate for the parents' generation. For example, the estimate for the first generation includes the fiscal impact of first-generation immigrants plus their dependent children.

## ... Immigrants are costly to state and local governments ...

Significant Fact:
States and towns
with high concentrations of
lesser-skilled
immigrants and
generous public
benefits tend
to incur greater
fiscal costs from
immigration.

A recent comprehensive study by the National Academy of Sciences found "the fiscal impacts of immigrants are generally positive at the federal level and *negative* at the state and local levels" (emphasis added).<sup>128</sup>

As is evident in the chart on the next page, in 2013 first-generation immigrants imposed a net cost on state/local governments of approximately \$1,600 per person. Meanwhile, second-generation Americans had a positive impact of \$1,700. Third-plus generations had a somewhat smaller, but still positive, impact of around \$1,300 per person.<sup>129</sup>

A number of factors help explain why immigrants provide net benefits to federal coffers but impose costs on state and local governments. The first relates to program eligibility. Immigrants more often qualify for state-level benefit programs, and especially make use of public schooling for their children. Since public schools are funded primarily by states and local districts, a large portion of the fiscal costs accrue at these levels of government.

Another factor relates to immigrant income levels. Lower-income immigrants, like lower-income natives, tend to receive more in government benefits than they pay in taxes. Therefore states and towns with high concentrations of both low-income immigrants and generous public benefits incur higher fiscal costs from immigration. A good comparison is California, a state with rather generous public benefits, versus South Carolina, a state with fewer benefits. For the period 2011-2013, first-generation immigrants imposed a net fiscal cost of \$2,050 per person in California, but provided a fiscal surplus of \$150 per person in South Carolina.<sup>130</sup>

One lesson may be that cities and states bear much of

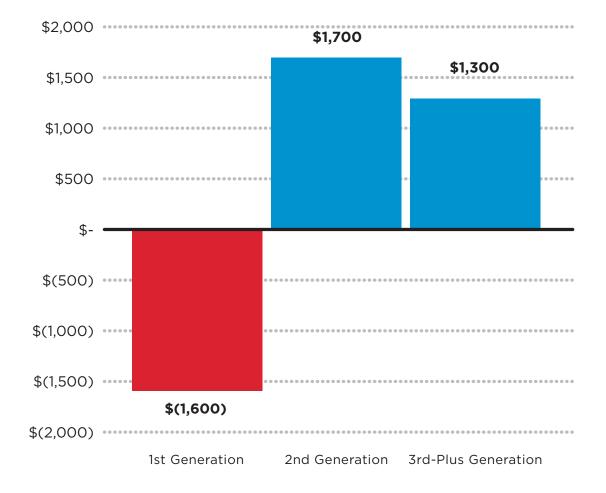
<sup>128</sup> Francine D. Blau, and Christopher Mackie, eds., *The Economic and Fiscal Consequences of Immigration*, Washington, D.C.: National Academies, 2016.

<sup>129</sup> Ibid.

<sup>130</sup> Ibid.

the responsibility themselves when they face net fiscal costs from immigration. Fiscal costs are not the fault of immigrants per se, and can be remedied by reforming welfare programs.

# Net Fiscal Impact per Person by Generation, State and Local Government Levels, 2011-2013



Source: Francine D. Blau, and Christopher Mackie, eds., *The Economic and Fiscal Consequences of Immigration*, Washington, D.C.: National Academies, 2016.

# ... But low-income immigrants use welfare programs less than low-income natives ...

Significant Fact:
Among lowincome
populations,
immigrants are
less likely than
natives to utilize
public assistance
programs.

A 2015 study from the Center for Immigration Studies finds that immigrant households are much more likely than native-born households to receive welfare benefits. This is not surprising. After all, welfare programs exist to provide assistance to the poor, and immigrants are more likely to be in poverty compared to natives.

When one compares *low-income* immigrants to similarly *low-income* natives, are immigrants still disproportionately represented among those using public assistance programs?

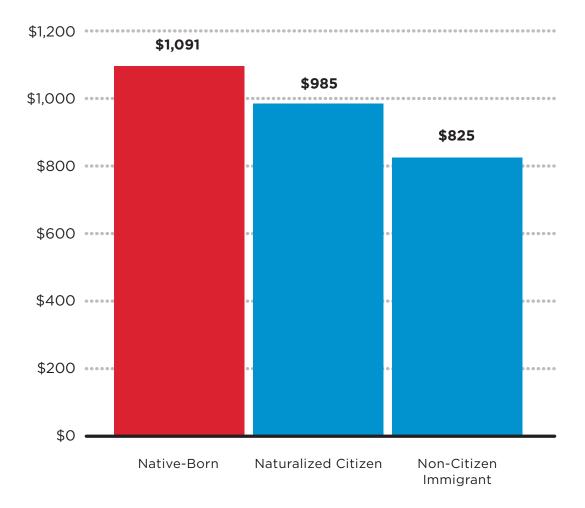
A study from the Cato Institute says "no." That study's authors, Leighton Ku and Brian Bruen of George Washington University, wrote that low-income immigrants utilize Medicaid, SNAP (formerly the Food Stamp Program), cash assistance, and Supplemental Security Income (SSI) at lower rates than do natives. Furthermore, the researchers find that since the utilization rates are lower, "the cost of public benefits to non-citizens is substantially less than the cost of equivalent benefits to the native-born." Using the SNAP program as an example, they find the average benefit per low-income adult was \$1,091 for natives compared to \$985 for naturalized-citizens and \$825 for non-citizen immigrants. <sup>132</sup> <sup>133</sup>

The National Academy of Sciences study on the fiscal impact of immigration finds that when other factors, such as age and educational attainment, are

- 131 Steven A. Camarota, Welfare Use by Immigrant and Native Households: An Analysis of Medicaid, Cash, Food, and Housing Programs, Center for Immigration Studies, Sept. 2015. http://cis.org/sites/cis.org/files/camarota-welfare-final.pdf.
- 132 Leighton Ku, and Brian Bruen, *Poor Immigrants Use Public Benefits at a Lower Rate than Poor Native-Born Citizens*, Rep., Cato Institute, 4 Mar. 2013, https://www.cato.org/publications/economic-development-bulletin/poorimmigrants-use-public-benefits-lower-rate-poor.
- 133 Note: An important difference between the Center for Immigration Studies (2015) report and the Cato Institute (2013) report is that the CIS study examines welfare usage by households while the Cato Institute study uses data for individuals. Since many households are mixed immigration status, using data for individuals gives a more precise estimate of welfare usage among natives versus immigrants.

controlled for, "...immigrants generally have a more salutary effect on budgets because they are disqualified from some benefit programs and because their children tend to have higher levels of education, earnings, and tax paying than the children of similar third-plus generation [i.e. native-born] adults." <sup>134</sup>

# Average Annual SNAP Benefit per Low-Income Adult, by Immigration Status, 2011



Source: Leighton Ku, and Brian Bruen, *Poor Immigrants Use Public Benefits at a Lower Rate than Poor Native-Born Citizens*, Rep., Cato Institute, 4 Mar. 2013, https://www.cato.org/publications/economic-development-bulletin/poor-immigrants-use-public-benefits-lower-rate-poor.

<sup>134</sup> Francine D. Blau, and Christopher Mackie, eds., *The Economic and Fiscal Consequences of Immigration*, Washington, D.C.: National Academies, 2016.

# ... And immigrants' fiscal impact has improved along with educational attainment.

Significant Fact:
Immigrants with
a bachelor's
degree provide
a net benefit of
approximately
\$307,000 to
government
coffers over their
lifetimes.

In summarizing its findings, the much-respected National Academy of Sciences study of the fiscal impacts of immigration states: "the historical record suggests that the total net fiscal impact of immigrants across all levels of government has become more positive over time." A main reason for this improvement, according to the study, is that " [t]oday's immigrants have more education than earlier immigrants."

Indeed, better educated immigrants (and natives, for that matter) impact government budgets more favorably. As the chart on the next page shows, immigrants whose highest degree is a high school diploma have a net negative fiscal impact of \$158,000 over a 75-year window. Yet, immigrants with a bachelor's degree provide a net benefit of approximately \$307,000 to government coffers over their lifetimes, and immigrants with an advanced degree have a positive fiscal impact of some \$765,000. 135 136

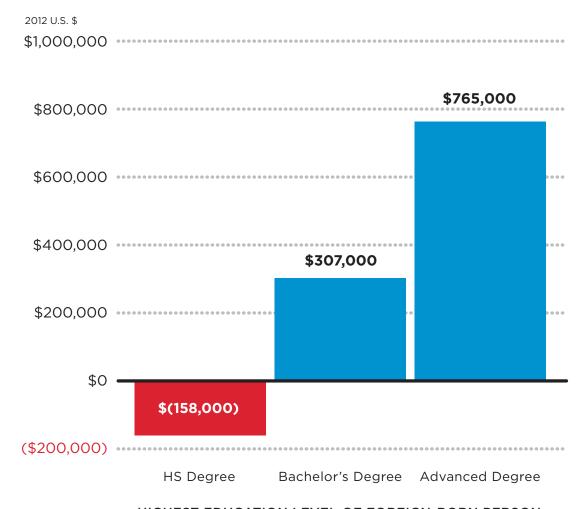
As educational levels continue to improve, welfare participation will shrink as incomes rise. This is good for households trying to escape poverty as well as for U.S. taxpayers.

<sup>135</sup> Francine D. Blau and Christopher Mackie, eds., *The Economic and Fiscal Consequences of Immigration*, Washington, D.C.: National Academies, 2016.

<sup>136</sup> Note: the fiscal impact figures are 75-year net present value figures, calculated using a 3 percent discount rate, for an immigrant arriving in the U.S. at the age of 25. Note these are conservative estimates since they assign fixed public good costs for defense, subsidies, rest-of-world payments, and interest payments evenly across all members of the population.



# 75-Year Net Present Value Fiscal Impact, Immigrant Arriving at Age 25, by Educational Attainment



#### HIGHEST EDUCATION LEVEL OF FOREIGN-BORN PERSON

Source: Francine D. Blau and Christopher Mackie, eds., *The Economic and Fiscal Consequences of Immigration*, Washington, D.C.: National Academies, 2016.

Note: the fiscal impact figures are 75-year net present value figures, calculated using a 3 percent discount rate, for an immigrant arriving in the U.S. at the age of 25. Note these are conservative estimates since they assign fixed public good costs for defense, subsidies, rest-of-world payments, and interest payments evenly across all members of the population.

# How do immigrants affect government finances?

Estimating the fiscal impact of immigrants with any hope of accuracy is difficult for at least five reasons. First, the U.S. has a federal structure, which means that fiscal policies vary among and within the federal, state, and local levels of government. Second, governments offer many different types of services. Some services, like public education, become more costly when additional immigrants are added to the system. Meanwhile, spending on other services — like national defense — is less impacted by increases in population.

Third, immigrants have an undeniable positive impact on the economy. Pinpointing immigrants' economic contributions and the impact of such contributions on government budgets is difficult, but important. After all, economic growth eases fiscal burdens. Fourth, fiscal impact studies generate a *present-value* estimate, meaning they project whether today's immigrants are a net cost or a net benefit depending on assumptions about future tax payments and future government spending. Needless to say, government policies change all the time, making it unrealistic to assume that current policies will be in place in the future.

Finally, immigrants are all different. Some speak English well; others struggle. Some have high levels of education; others never complete high school. Some are in the prime of their careers; others are children or retirees. Accounting for all these differences greatly influences one's assessment of immigrants' fiscal impact.

Nonetheless, many scholars have attempted to quantify the impact immigrants have on government budgets. Surveying decades' worth of studies and considering them as a whole, immigration scholar Alex Nowrasteh reports: "the fiscal impacts of immigration are mostly positive, but they are all relatively small." <sup>137</sup>

A nuanced look at the various studies suggests that an immigrant's fiscal impact depends largely on education level. Like natives, immigrants with high levels of education usually pay more in taxes over their lifetimes than they receive in government benefits. Meanwhile, lesser-educated immigrants tend to have a negative fiscal impact.

Immigrants' fiscal impact also varies by level of government. A recent comprehensive study by the National Academy of Sciences found "the fiscal impacts of immigrants are generally positive at the federal level and negative at the state and local levels." States and towns that have a

<sup>137</sup> Alex Nowrasteh, *The Fiscal Impact of Immigration*, working paper (Washington: Cato Institute, 2014), http://object.cato.org/sites/cato.org/files/pubs/pdf/working-paper-21-fix.pdf.

<sup>138</sup> Francine D. Blau and Christopher Mackie, eds., *The Economic and Fiscal Consequences of Immigration*, Washington, D.C.: National Academies, 2016.



high concentration of low-skill immigrants and provide generous government benefits are most likely to be the places where immigrants impose fiscal burdens.

What about unauthorized immigrants? Rasmussen Reports found in a 2017 survey that 49 percent of Americans believed illegal immigrants were a significant strain on the U.S. budget. Yet unauthorized immigrants generally are only eligible for Emergency Medicaid, and not the host of other welfare programs available to citizens and legal permanent residents. This means many unauthorized immigrants pay taxes, but in many cases they do not receive much in the way of benefits. To be sure, assessing the fiscal impact of unauthorized immigrants is very difficult because of the lack of data about this group of immigrants. However, the fiscal costs associated with unauthorized immigration are likely smaller than most people imagine.

Clearly, the existence of government welfare programs complicates analyses of the effects immigrants have on the well-being of their host countries. But one recent academic article builds the presence of redistributive government programs into a quantitative model estimating the overall impact of immigration on natives in various countries. Analyzing 20 countries around the world, that study finds immigration benefits the native-born, on net, even after controlling for the reality of redistributive government programs.<sup>140</sup>

Good news for the U.S. is that the fiscal impact of immigrants has been improving over recent decades. This is largely thanks to the higher level of educational attainment among recent immigrants compared to those who came in earlier waves. While there is no guarantee this trend of improving education levels will continue, if it does, one would expect immigrants' fiscal impact to improve further in the future.

Overall there is not a compelling conclusion to be made in support of or opposition to immigration on the basis of fiscal costs alone. Immigrants' fiscal impact is simply not that dramatic, positive or negative. Meanwhile immigrants' economic contributions are considerable. Americans should keep this dynamic in mind.

<sup>139 &</sup>quot;Voters Measure Illegal Immigration in Major Crime, More Tax Dollars." Rasmussen Reports, 29 Mar. 2017. http://www.rasmussenreports.com/public\_content/politics/current\_events/immigration/march\_2017/voters\_measure\_illegal\_immigration\_in\_major\_crime\_more\_tax\_dollars.

<sup>140</sup> Michele Battisti et al., *Immigration, Search, and Redistribution: A Quantitative Assessment of Native Welfare*, working paper no. 20131 (Cambridge: National Bureau of Economic Research, 2014).

<sup>141</sup> Francine D. Blau and Christopher Mackie, eds., *The Economic and Fiscal Consequences of Immigration*, Washington, D.C.: National Academies, 2016.

# Many immigrants lack health insurance ...

Significant Fact:
In 2015,
immigrants
were more than
twice as likely as
natives to lack
health insurance
coverage.

A national concern generating much attention in recent years has been the proportion of Americans who lack health insurance. The U.S. Census Bureau estimates that in 2015 approximately 7.7 percent of native-born Americans, some 21.2 million people, did not have health insurance. That same year, 18.1 percent of immigrants lacked health insurance, meaning that immigrants were more than twice as likely to lack health insurance compared to natives.<sup>142</sup>

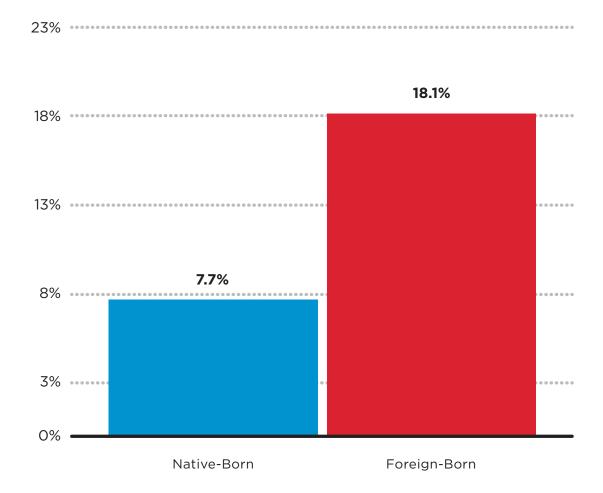
Breaking out the health-insurance data based on immigrants' citizenship status shows that in 2015 approximately 26.4 percent of non-citizen immigrants lacked health insurance compared to 8.7 percent of naturalized-citizen immigrants. While both groups of immigrants were uninsured at a higher rate than native-born Americans, these data points suggest the problem is worse for non-citizen immigrants. <sup>143</sup>

142 U.S. Census Bureau, Current Population Survey, 2016 Annual Social and Economic Supplement

143 lbid.



#### Percentage of People without Health Insurance, Foreign-Born and Native-Born, 2015



Source: U.S. Census Bureau, Current Population Survey, 2016 Annual Social and Economic Supplement.

# ... But immigrants eventually gain health insurance.

Significant Fact: Nearly 95% of immigrants who have been in the U.S. for at least 40 years have some form of health insurance. Immigrants who have lived in the U.S. for several years are more likely to have health insurance compared to recent immigrants. Some 23 percent of immigrants who have lived in the U.S. for fewer than 20 years lack health insurance. Yet that percentage drops to 16.7 percent for immigrants who have lived in the U.S. between 20 and 29 years. It continues to fall in a stepwise fashion the longer an immigrant lives in the U.S., whereas the uninsured rate stands at only 5.2 percent for immigrants who have lived in the U.S. for 40 or more years. 144

Medicare and Medicaid — the governmentoperated health-insurance programs for the elderly and low-income, respectively — are certainly a partial explanation as to why immigrants who have been in the U.S. for a long time are more likely to have health insurance. Furthermore, the Affordable Care Act (ACA) has reduced the proportion of both native-born Americans and immigrants without health insurance in recent years. As recently as 2013, some 11.2 percent of natives and 27.7 percent of immigrants lacked health insurance. While unauthorized immigrants are not eligible for insurance through the ACA, the law does qualify low-income naturalized citizens and legal permanent residents for subsidized health insurance. Furthermore, under the ACA, legal immigrants who have lived in the U.S. for at least five years can qualify for Medicaid depending on their income level.

However, these government-operated programs are not the full explanation. While a large share of immigrants who have been in the U.S. for more than 40 years do participate in a government-run health insurance policy, some 57.7 percent of that same group carried health insurance from a private provider as well. 145, 146

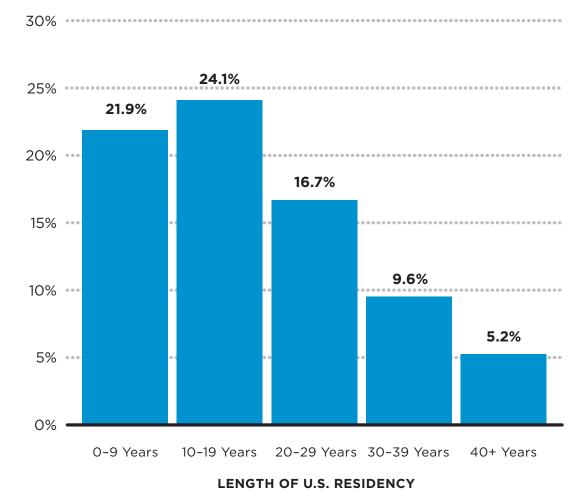
<sup>144</sup> U.S. Census Bureau, Current Population Survey, 2016 Annual Social and Economic Supplement, *Table HI09. Health Insurance Coverage Status by* Nativity, Citizenship, and Duration of Residence for All People: 2015.

<sup>145</sup> Author's calculations. Data from U.S. Census Bureau, Current Population Survey, 2013 Annual Social and Economic Supplement, Table HI09. Health Insurance Coverage Status by Nativity, Citizenship, and Duration of Residence for All People: 2015.

<sup>146</sup> Readers should note that it is possible for an individual to be covered by both government and private health insurance plans simultaneously.

Furthermore, although immigrants are more likely than natives to lack health insurance, studies show immigrants consume fewer medical services, are less likely to visit the emergency room, and are more likely to pay their medical costs out of pocket. And when it comes to Medicare, immigrants on average contribute more than they take in benefits, and average expenditures on immigrants are lower than they are for natives.<sup>147</sup>

# Percentage of the Foreign-Born without Health Insurance, by Length of U.S. Residency, 2015



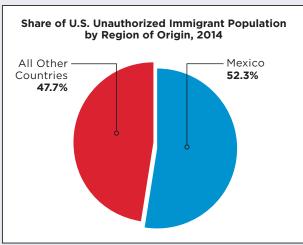
Source: U.S. Census Bureau, Current Population Survey, 2016 Annual Social and Economic Supplement.

<sup>147</sup> Alex Nowrasteh, *The Fiscal Impact of Immigration*, working paper (Washington: Cato Institute, 2014), http://object.cato.org/sites/cato.org/files/pubs/pdf/working-paper-21-fix.pdf.

# A Special Focus on Immigration from Latin America

Immigrants from Latin American countries have a vastly different and oftentimes more difficult experience in the U.S. compared to immigrants from other regions of the world. In general, Latin American-born immigrants are more likely to be unauthorized, have significantly lower median earnings, and have less fluency in English compared to the average for all U.S. immigrants.

Approximately 52 percent of all unauthorized immigrants living in the U.S. in 2014 came from Mexico. This situation is not ideal for the U.S. or Mexico; it is especially not good for the unauthorized Mexican-born immigrants themselves. Being unauthorized greatly limits employment prospects and chance for upward economic mobility.



Source: Pew Research Center, 2017

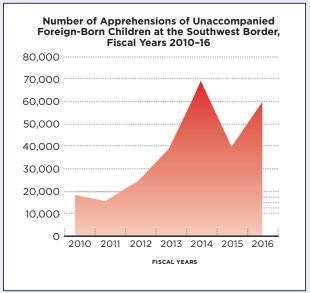
In the last several years
Americans have witnessed
another alarming and troubling
phenomenon: thousands of
unaccompanied immigrant
children have come across
the Southwest border and
entered the U.S. illegally. The
U.S. Border Patrol reports that
nearly 60,000 unaccompanied
immigrant minors were
apprehended along the
Southwest border in fiscal year
2016. The 2016 figure represents

a modest reduction from the 68,000 unaccompanied children who arrived in FY 2014. Even so, in FY 2014 many hoped this problem would be a temporary phenomenon, but data for FY 2015 and FY 2016 suggest this was not a one-time spike and indeed is likely to be an ongoing issue.<sup>149</sup>

<sup>148</sup> Ana Gonzalez-Barrera, and Jens Manuel Krogstad, *What We Know about Illegal Immigration from Mexico*, (Pew Research Center, 2017), http://www.pewresearch.org/fact-tank/2017/03/02/what-we-know-about-illegal-immigration-from-mexico/.

<sup>149</sup> U.S. Department of Homeland Security, U.S. Border Patrol, Southwest Border Sectors: Family Unit and Unaccompanied Alien Children Apprehensions..." https://www.cbp.gov/sites/default/files/assets/ documents/2016-Oct/BP%20Southwest%20Border%20Family%20Units%20and%20UAC%20Apps%20-%20 FY16.pdf.

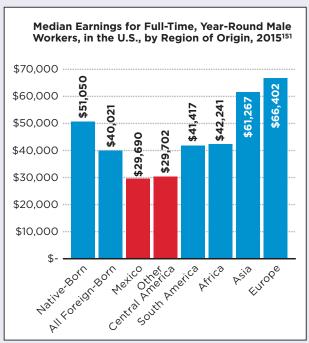
These children have come almost exclusively from Latin America, with the top sending countries in FY 2016 being, in order: Guatemala (18,913), El Salvador (17,512), Mexico (11,926), and Honduras (10,468).<sup>150</sup> These countries are marred by violence and lack serious economic opportunities for their young people. Furthermore, many of these children have parents or other family members in the U.S. — many of them likewise unauthorized immigrants —



Source: U.S. Department of Homeland Security, U.S. Border

with whom they seek to become reunited.

Latin American–born immigrants have substantially lower earnings compared to other immigrant groups in the U.S. In 2015, full-time, year-round male workers from Latin American countries brought home less than \$30,000. Meanwhile, Asian- and European-born immigrants working in the



Source: U.S. Census Bureau, 2015 American Community Survey.

U.S. earned more than twice that amount.<sup>152</sup>

The low education level of the Latin American–born in the U.S. is one main contributor to their low earnings. While one in two immigrants from Asia has a college degree, less than one in 10 immigrants from Latin American countries do.<sup>153</sup>

Yet lower educational achievement does not fully explain the earnings gap. Immigrants from Latin America with bachelor's degrees had median earnings of around \$45,000 in 2012. Mexican-born immigrant

<sup>150</sup> U.S. Department of Homeland Security, U.S. Border Patrol, Southwest Border Sectors: Family Unit and Unaccompanied Alien Children Apprehensions..." https://www.cbp.gov/sites/default/files/assets/documents/2016-Oct/BP%20Southwest%20Border%20Family%20Units%20and%20UAC%20Apps%20-%20FY16.pdf.

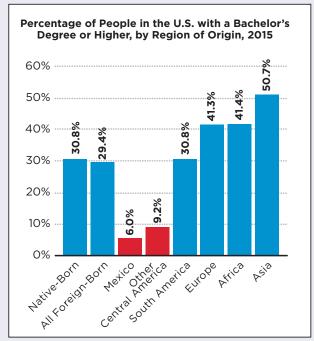
<sup>151 &</sup>quot;Other Central America" includes the countries of Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama.

<sup>152</sup> U.S. Census Bureau, 2015 American Community Survey.

<sup>153</sup> U.S. Census Bureau, 2015 American Community Survey.

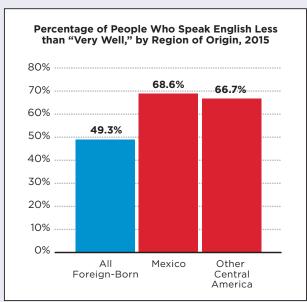
workers with bachelor's degrees fared even worse with median earnings of less than \$41,000. By contrast, immigrants with bachelor's degree as a whole had median earnings of more than \$55,000 in 2013, and the same cohort of Asian- and European-born immigrants had median earnings over \$60,000.<sup>154</sup>

Poor English proficiency stymies economic opportunities of immigrants from Latin America. English language skills are necessary for most high-paying jobs. One consequence is that the foreign-



Source: U.S. Census Bureau, 2015 American Community Survey

born from Latin America tend to fill lesser-skilled, and therefore lower-paying, jobs — even more so than immigrants as a whole. For example, while more than 45 percent of Asian and European-born immigrants worked in "management, professional, and related occupations" in 2013, the same was true of only 15.7 percent of immigrants from Latin America and 10 percent



Source: U.S. Census Bureau, 2013 American Community Survey

from Mexico. Latin-American workers, in turn, were much more likely to work in sectors like agriculture, construction, transportation, or material moving and services. In fact, in fiscal years 2013–14, Mexican-born immigrants accounted for 67 percent of hired farmworkers in the U.S. In the U.S. economy relies on these lesser-skilled workers too, but the path to greater earnings is through more professional-oriented jobs.

What is the result of lower

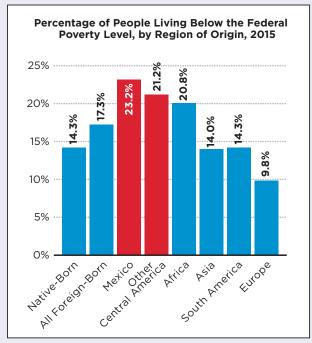
<sup>154</sup> U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, *Table 3.12: Total Earning of Full-Time, Year Round, Foreign-Born Workers 25 Years and Over with Earnings by Educational Attainment and World Region of Birth: 2012.* 

<sup>155</sup> U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, *Table 3.7:*Occupation of Employed Foreign-Born Civilian Workers 16 Years and Over by Sex and World Region of Birth:

<sup>156</sup> U.S. Department of Labor, The National Agricultural Workers Survey, *Table 1: National Demographic Characteristics*. 13 Jan. 2017. https://www.doleta.gov/agworker/naws.cfm#d-tables.

earnings and less remunerative job opportunities? More poverty. A substantially higher share of Mexican-born immigrants and immigrants from what the U.S. Census Bureau terms "other Central American" countries<sup>157</sup> were below the federal poverty threshold in 2015 compared to immigrants as a whole and the overall U.S. population.

Segmenting the data reveals important differences in the experiences of the various immigrant groups in the U.S. For instance, Asian- and European-born immigrants



Source: U.S. Census Bureau, 2015 American Community Survey

outperform immigrants as a whole on many indicators. And when it comes to earnings, educational attainment, and the incidence of poverty, these two immigrant groups outperform even the average for America's native-born population.

Meanwhile, other immigrant groups face special challenges, especially the Latin American— and Mexican-born. More than half of the unauthorized population in the U.S. was born in Mexico. The Mexican-born score far below other immigrant groups when it comes to educational attainment, earnings, English proficiency, and poverty. Immigrants from other Central American countries do better than those from Mexico, but still lag far behind the average for the foreign-born as a whole.

To be sure, these data do not describe the experience of every Latin American–born immigrant in the U.S. Some of the greatest success stories in America are the stories of Latin American immigrants. However, the degree to which the data diverge is striking.

<sup>157 &</sup>quot;Other Central America" includes the countries of Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama.

# Chapter 4: Achieving the American Dream



### Immigrants believe in the American dream.

Significant Fact:

When polled, some 70.1% of immigrants believe their children will enjoy a higher standard of living than they did, and 72.8% say "hard work" is what's needed to get ahead in America.

The American dream tells us that anyone, of any background, can achieve success in the United States. America is a land of freedom, allowing individuals to control their own destinies. In America, one does not have to be born wealthy to live a prosperous life. Rather, anyone can achieve success through hard work and their own merit.

Immigrants believe in the American dream. Indeed, this conviction that in America anyone can build a better life has drawn millions of immigrants to her shores throughout history. This remains true today. When polled, some 70.1 percent of immigrants believe their children will enjoy a higher standard of living than they did. Furthermore, 72.8 percent of immigrants say they believe "hard work" is what's needed to get ahead in America. In these respects, immigrants may be more American than the native-born population itself. Only 47.0 percent of natives believe their children will surpass their own standard of living, and 69.3 percent of natives believe hard work is the key to success in America. <sup>158</sup>

Immigrants' optimism about the American dream does not fade. In fact, among the children of immigrants, the sentiment is even stronger: 78 percent and 72 percent of second-generation Hispanic- and Asian-Americans, respectively, agree that through hard work people will get ahead in America. Furthermore, second-generation Americans are more likely to feel that their own standard of living exceeds that of their parents when their parents were at a similar stage in life. 159

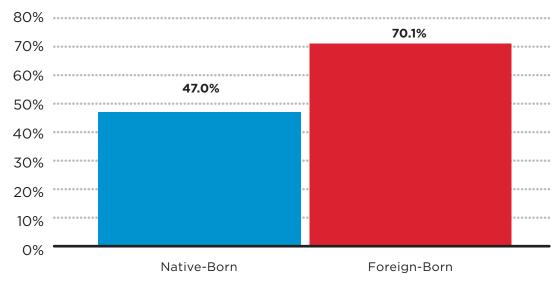
It is telling that the children of immigrants have an even stronger belief in the American dream than their parents. After all, these children grow up witnessing firsthand the experiences of their immigrant parents.

<sup>158</sup> Integration of Immigrants into American Society: Panel on the Integration of Immigrants into American Society, Ed. Mary C. Waters and Marisa Gerstein Pineau, Washington, D.C.: National Academies, 2015, 307-09.

<sup>159</sup> Pew Research Center, "Second Generation Americans: A Portrait of the Adult Children of Immigrants," report (Washington, 2013), http://www.pewsocialtrends.org/files/2013/02/FINAL\_immigrant\_generations\_report\_2-7-13.pdf.

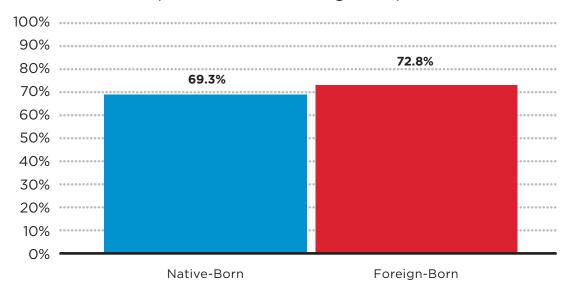


# Percentage Who Believe Their Children's Standard of Living Will Surpass Their Own, Native-Born and Foreign-Born, 2012



Source: Integration of Immigrants into American Society: Panel on the Integration of Immigrants into American Society, citing data from the General Social Survey.

## Percentage Who Believe "Hard Work" is Key to Getting Ahead in the U.S., Native-Born and Foreign-Born, 2012



Source: Integration of Immigrants into American Society: Panel on the Integration of Immigrants into American Society, citing data from the General Social Survey.

# Immigrants benefit mightily by coming to the U.S.

Significant Fact: **Immigrants** move to the U.S. for numerous reasons, but economic reasons are especially compelling. After all, many **immigrants** experience large wage increases by working in the U.S.

Immigrants themselves are without a doubt the greatest beneficiaries of immigration to the U.S. And although immigrants move to the U.S. for numerous reasons, economic reasons are especially compelling.

To understand why, one must simply look to relative wages between those working in the U.S. and those working in other countries.

For example, a 35-year-old working in Yemen with nine years of education would expect to earn approximately \$126 per month. Yet that same worker would earn \$1,940 per month in the U.S., an amount more than 15 times greater. Over the course of a year, the worker can take home around \$21,700 more just by working in the U.S.

Yemen is the most extreme example. But of a sample of forty-two developing countries examined, workers from a country at the median of the sample could expect to quadruple their wages by working in the U.S. Of all countries in the sample, workers in the Dominican Republic have the smallest wage ratio 160 compared to wages possible in the U.S. But even Dominican workers could expect to double their wages, and enjoy nearly \$9,000 of extra income each year, by working in the U.S. instead of the Dominican Republic.<sup>161</sup>

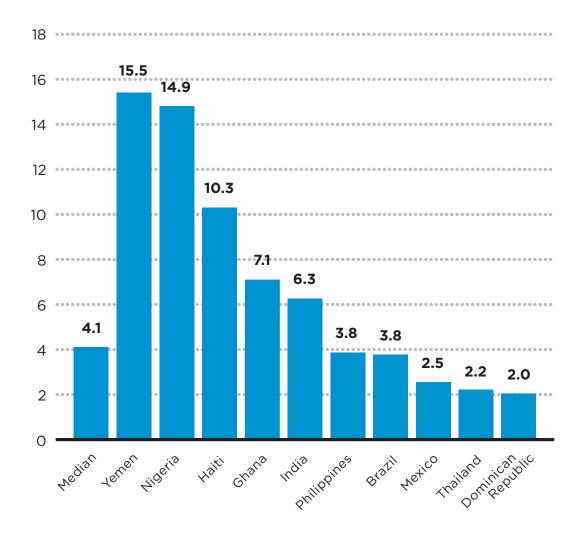
How is it possible that a worker with the exact same skills could earn so much more doing the same work in the U.S. compared to other countries? The answer lies in the overall productivity of the U.S. economy. The U.S. has a highly specialized economy and therefore can better put individuals' skills to productive use, resulting in higher wages.

<sup>160</sup> The ratios reported here are the predicted ratio between the average wage of a U.S.-resident, 35-year-old employed male urban worker born in each country with between nine and twelve years of education acquired in each country, and the average wage of an observably identical worker residing in each origin country.

<sup>161</sup> Michael A. Clemens, Claudio E. Montenegro, and Lant Pritchett, The Place Premium: Wage Differences for Identical Workers Across the U.S. Border, working paper no. RWP09-004 (John F. Kennedy School of Government, Harvard University, 2009).



#### Estimated Ratio of Wages Earned in the U.S. Compared to Wages Earned by an Identical Worker in Country of Birth, Selected Countries



Source: Clemens et al., 2009.

Note: The ratios reported in this graph represent the predicted ratio between the average wage of a US-resident 35-year-old urban male worker born in each country with nine years of education acquired in each country, to the average wage of an observably identical worker residing in each origin country.

# The children of immigrants learn English ...

Significant Fact:
Although English
proficiency is
a problem for
many immigrants,
the children
of immigrants
develop strong
command of the

English language.

One of the most important determinants of immigrants' success in the U.S. is their ability to speak English. English fluency allows immigrants to assimilate more quickly into American culture. It also allows immigrants to fill jobs that require greater levels of communication. Such jobs often are higher paying.

Unfortunately, as shown previously, proficiency in the English language is a tremendous challenge for immigrants in the U.S. today. Almost 85 percent speak a language other than English in their homes, and almost half say they speak English less than "very well." <sup>162</sup> English proficiency is even more of a challenge for Hispanic immigrants.

Yet, by and large, English proficiency is not a problem for second-generation Americans. Even if their parents struggle to learn English, immigrants' children grow up interacting with native speakers and operating in a predominantly English-language society. Data show that only 15 percent and 18 percent of second-generation Hispanic- and Asian-Americans, respectively, say they do not have very good command of the English language. These percentages are still higher than for the U.S. population at large, but the magnitude of the improvement in English proficiency over a single generation is remarkable.

Whether the children of immigrants retain fluency in their parents' native language varies among immigrant groups. A large percentage of second-generation Hispanics, around 80 percent, report speaking Spanish. Meanwhile only around 40 percent of second-generation Asian Americans speak the native language of their parents. By the third and certainly fourth generations, nearly all are monolithic English speakers. 165

<sup>162</sup> U.S. Census Bureau, 2015 American Community Survey.

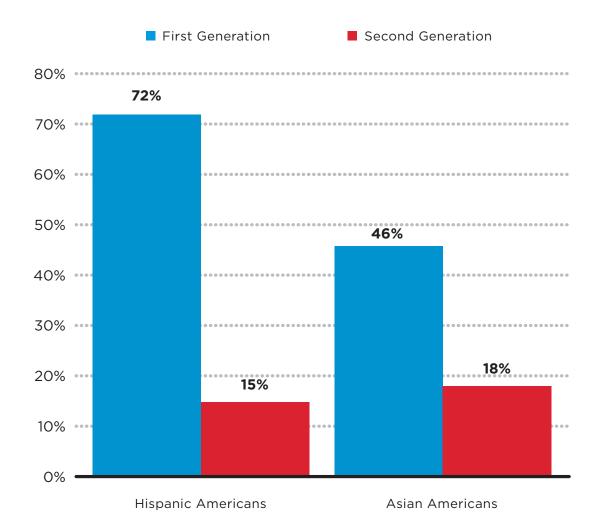
<sup>163</sup> Pew Research Center, "Second Generation Americans: A Portrait of the Adult Children of Immigrants," report, (Washington, 2013), http://www. pewsocialtrends.org/files/2013/02/FINAL\_immigrant\_generations\_ report\_2-7-13.pdf.

<sup>164</sup> Ibid.

<sup>165</sup> Integration of Immigrants into American Society: Panel on the Integration of Immigrants into American Society, Ed. Mary C. Waters and Marisa Gerstein Pineau, Washington, D.C.: National Academies, 2015, 314.



## Percentage of Hispanics and Asian Americans Who Speak English Less than "Very Well," by Generation, 2011-12



Source: Pew Research Center, 2013.

Note: "First Generation" refers to the foreign-born population in the U.S. "Second Generation" refers to people who were born in the United States to at least one foreign-born parent.

#### ... And they boost America's educational attainment.

**Significant Fact:** Secondgeneration Americans are much more likely to have earned at least a high school degree compared to their parents. In 2013, approximately 27.9% of **immigrants** lacked a high school degree compared to only 9.4% of secondgeneration Americans.

The level of education attained by immigrants in America is disproportionately represented at both the low and high ends. Many immigrants do not have a high school degree while at the same time many immigrants have bachelor and advanced degrees.

Meanwhile, the children of immigrants make dramatic strides in achieving higher levels of education. Second-generation Americans are much more likely to have earned at least a high school degree compared to their parents. In 2013, approximately 27.9 percent of immigrants lacked a high school degree compared to only 9.4 percent of second-generation Americans. And it is a similar story on the high end of the educational distribution. Approximately 37.4 percent of second-generation Americans had earned a bachelor's degree or higher in 2013 compared to 30.1 percent of immigrants. Data also show that second-generation Americans outperform the U.S. population as a whole when it comes to educational attainment.<sup>166</sup>

Variations within the second generation of course do exist. For example, in 2012, 55 percent of secondgeneration Asian-Americans possessed at least a bachelor's degree while the same was true for only 21 percent of second-generation Hispanics. 167 So while the children of Asian immigrants greatly outperform the U.S. population as a whole, the children of Hispanic immigrants tend to attain less education than the population at large.

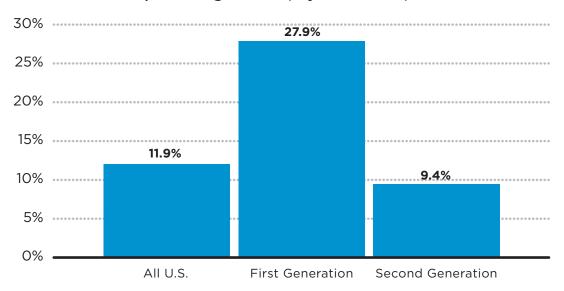
What's important to note is that within individual immigrant groups, educational attainment improves significantly between the first and second generations. This indicates progress and benefits the broader economy as a whole.

<sup>166</sup> U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2012.

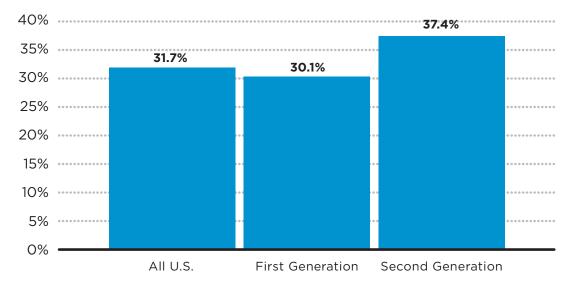
<sup>167</sup> Pew Research Center, "Second Generation Americans: A Portrait of the Adult Children of Immigrants," report (Washington, 2013), http://www.pewsocialtrends.org/files/2013/02/FINAL\_immigrant\_generations\_ report\_2-7-13.pdf.



#### Percentage of All People Age 25 Years and Older Who Have Not Completed High School, by Generation, 2013



#### Percentage of All People Age 25 and Older with a Bachelor's Degree or Higher, by Generation, 2013



Source: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, *Table 4.5: Educational Attainment of the Population 25 Years and Over by Sex and Generation: 2013.* 

Note: "First Generation" refers to the foreign-born population in the U.S. "Second Generation" refers to people who were born in the United States to at least one foreign-born parent.

#### The children of immigrants secure good jobs ...

**Significant Fact:** In 2013, approximately two-thirds of second-generation **Americans worked** in what one might consider "white collar" jobs.

First-generation immigrants, especially those with low education levels, tend to fill jobs that require more physical stamina and fewer communication skills. For example, in 2013, more than one-quarter of all immigrants worked in the service sector of the economy. Another 15.0 percent worked in production, transportation, and material moving, and 11.0 percent worked in construction, extraction, and maintenance. Meanwhile, less than half filled jobs in the sectors of the economy that are typically higher paying: management and professional jobs and sales and office jobs.

But with higher levels of education, stronger command of the English language, and more immersion in American culture, the children of immigrants are better positioned than their parents to secure higher-paying jobs.

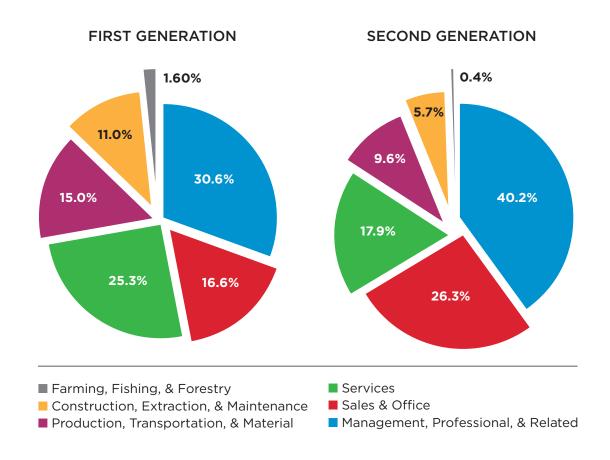
In contrast to first-generation immigrants, in 2013 a full two-thirds of second-generation Americans worked in what one might consider "white-collar" jobs ("management and professional" and "sales and office"). Similarly, second-generation Americans were roughly one-third less likely than immigrants to work in the service, production, transportation, shipping, construction, extraction, and maintenance sectors of the economy. 168 The children of Mexican and other Central American immigrants, along with secondgeneration American women generally, see especially substantial advancement into white-collar sectors of the economy compared to their parents. 169

<sup>168</sup> U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, Table 4.7: Occupation of Employed Civilian Workers 16 Years and Over by Sex, Generation: 2013.

<sup>169</sup> Integration of Immigrants into American Society: Panel on the Integration of Immigrants into American Society, Ed. Mary C. Waters and Marisa Gerstein Pineau, Washington, D.C.: National Academies, 2015, 282



## Percentage of Foreign-Born People and Second-Generation Americans Working in Each Occupation, 2013



Source: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2013.

Note: "First Generation" refers to the foreign-born population in the U.S. "Second Generation" refers to people who were born in the United States to at least one foreign-born parent. Data refer to employed civilian workers 16 years of age and older.

## Second-generation Americans enjoy high earnings and are less likely to be in poverty ...

#### **Significant Fact:**

Second-

generation

**Americans** 

outearn their

**immigrant** 

parents.

Education level, proficiency in English, and job type are all major factors in determining a worker's earnings. As we've seen, second-generation Americans typically excel in these areas compared to first-generation immigrants, and their earnings greatly exceed those of the earlier generation.

In 2012, median total earnings for second-generation Americans over the age of 25 were \$49,055, an amount 7.2 percent greater than the median earnings for all U.S. workers and 33.0 percent greater than the median earnings of first-generation immigrants.<sup>170</sup>

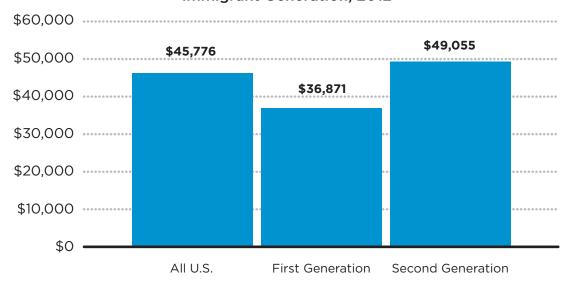
With higher earnings, second-generation Americans are predictably less likely to be in poverty. In 2013, 12.8 percent of all adults in the U.S. had incomes qualifying them as below the federal poverty level. Poverty was much more prevalent for first-generation Americans, with some 18.8 percent of adults falling below the poverty level. Yet, a smaller percentage, 13.6 percent, of second-generation Americans were in poverty. To be sure, poverty remains an issue deserving great attention, even for second-generation Americans, but the progress these data points represent is encouraging.

<sup>170</sup> U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, *Table 4.12: Total Earnings of Full-Time, Year-Round Workers Aged 25 Years and Over with Earnings, by Educational Attainment and Generation: 2012.* 

<sup>171</sup> Integration of Immigrants into American Society: Panel on the Integration of Immigrants into American Society, Ed. Mary C. Waters and Marisa Gerstein Pineau, Washington, D.C.: National Academies, 2015, 287.

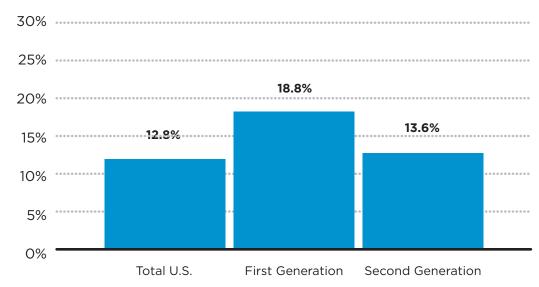


#### Median Total Earnings of Year-Round Workers Age 25+ Years, by Immigrant Generation, 2012



Source: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement.

#### Percentage of Adults Living Below the Federal Poverty Level, by Immigrant Generation, 2013



Source: U.S. Census Bureau, Current Population Survey, as appears in Table 6-9 of *Integration of Immigrants into American Society: Panel on the Integration of Immigrants into American Society*, Ed. Mary C. Waters and Marisa Gerstein Pineau, Washington, D.C.: National Academies, 2015.

Note: "First Generation" refers to the foreign-born population in the U.S. "Second Generation" refers to people who were born in the United States to at least one foreign-born parent.

# The children of immigrants are often homeowners.

Significant Fact:
In 2012, 64% of
second-generation
American households and 65%
of all adult
households in the
U.S. owned their
own homes.

Homeownership is significant in American culture, a key marker of realizing the American dream. After all, when people own a home, they own a small piece of the United States itself. For immigrants and their children, purchasing a home gives a sense of permanency to their lives in the U.S.

Approximately half of first-generation immigrant households own the home in which they live, a considerably smaller percentage than the U.S. population as a whole. No doubt accumulating the financial resources to qualify for a mortgage takes time. But it also takes time to decide to put down roots in one's new homeland.

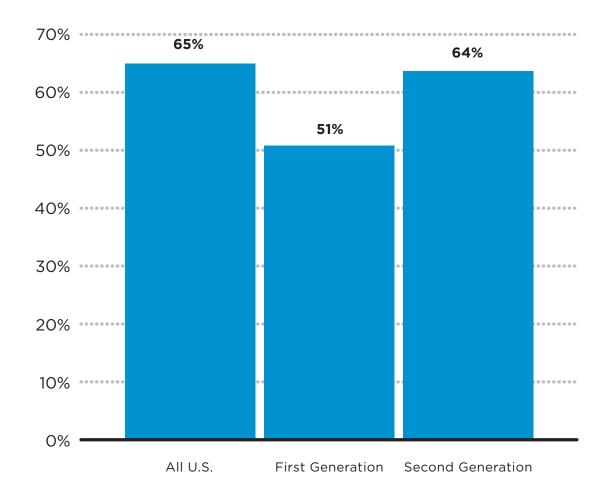
But as immigrants remain in the U.S. longer, they become more likely to take that step and become homeowners. The homeownership rate for second-generation American households very closely tracks the rate for all adult households in the U.S. In 2012, 64 percent of second-generation American households and 65 percent of all adult households in the U.S. owned their own homes.<sup>172</sup>

Pessimists point to the housing bubble that was largely responsible for the 2008–09 U.S. recession as evidence that homeownership is perhaps not the utopia so often idealized in American culture. Even so, homeownership remains a goal of millions of Americans, and the data show that the children of immigrants make large strides toward reaching this milestone.

<sup>172</sup> Pew Research Center, "Second Generation Americans: A Portrait of the Adult Children of Immigrants," report (Washington, 2013), http://www.pewsocialtrends.org/files/2013/02/FINAL\_immigrant\_generations\_report\_2-7-13.pdf.



#### Homeownership Rate by Immigrant Generation, Households, 2012



Source: Pew Research Center, 2013.

Note: "First Generation" refers to the foreign-born population in the U.S. "Second Generation" refers to people who were born in the United States to at least one foreign-born parent.

## A majority of immigrants' children consider themselves 'typical Americans.'

Significant Fact:

More than 60% of both secondgeneration **Hispanic- and Asian-Americans** consider themselves "typical

Americans."

America takes pride in its long history of welcoming immigrants and successfully integrating them into the wider culture. But the process of integration takes time.

When surveyed in 2011 and 2012, only about onethird of first-generation Hispanic- and Asian-American immigrants said they considered themselves "typical Americans." Of course, new immigrants are not typical Americans. They come to America speaking their native languages, uncertain of the norms of American society, and understandably more comfortable with the customs and traditions of their home countries.

But over time immigrants and their children feel more and more at home in their adopted homeland. The data bear this out: 61 percent of both second-generation Hispanic- and Asian-Americans consider themselves "typical Americans." Second-generation Americans are also much more likely than their preceding generation to report they get along well with all of America's major ethnic and racial groups and have friends among them. 173

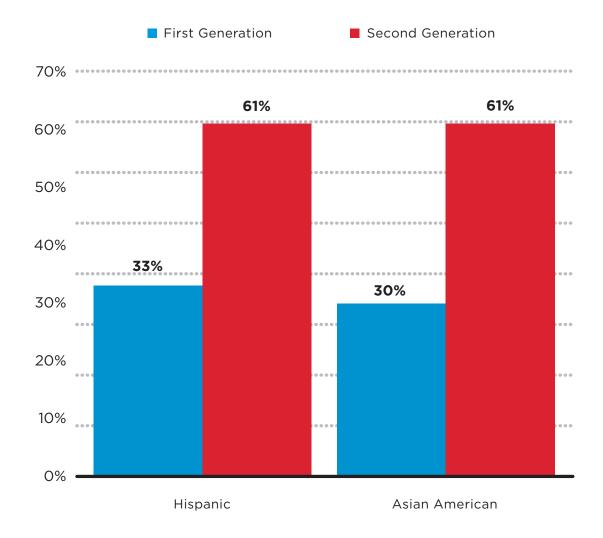
The beauty of America is that immigrants are not forced to abandon their ancestral heritage. Rather, they are encouraged to bring the best traditions of their cultures to America to contribute in new ways. Writing about 19th-century immigrants to the U.S., the Pulitzer Prize-winning historian Oscar Handlin remarked that immigrants "could not impose their own ways upon society," but neither "were they constrained to conform to those already established." America's fluid social system and strong institutions — which treated newcomers as equal to natives — provided immigrants "a wide realm of choice," and helped them play "a prominent role in the development of the United States."174

<sup>173</sup> Pew Research Center, "Second Generation Americans: A Portrait of the Adult Children of Immigrants," report (Washington, 2013), http://www. pewsocialtrends.org/files/2013/02/FINAL\_immigrant\_generations\_ report\_2-7-13.pdf.

<sup>174</sup> Oscar Handlin, The Uprooted: The Epic Story of the Great Migrations That Made the American People, 2nd ed. (Boston: Little, Brown, 1990), 4-5.



## Percentage Who Consider Themselves a 'Typical American,' First-Generation Immigrants vs. Second-Generation Americans, 2011–12



Source: Pew Research Center, 2013, page 10.

Note: "First Generation" refers to the foreign-born population in the U.S. "Second Generation" refers to people who were born in the United States to at least one foreign-born parent.

# Chapter 5: **Public Policy** Considerations

#### **Public Policy Considerations**

Existing U.S. immigration law fails to maximize the potential benefits that immigrants could bring to America and its economy.

Overall, U.S. immigration policy gives the largest preference to immigrants coming to the U.S. for family reunification purposes. Work-based immigration gets much less priority, negatively impacting both high-skilled and lesser-skilled immigrants.

On the high-skilled side, immigrants often have difficulty obtaining a visa or green card to work in the U.S. Even when they are successful, such immigrants struggle to remain in the U.S. for the long term due to time limits of visa programs and difficulty securing a green card, which grants legal permanent status.

Meanwhile, sufficient temporary guest-worker programs do not exist to allow lesser-skilled immigrants to fill open jobs in the U.S. The demand for these workers without a program to legally admit them to the U.S. has contributed to widespread unauthorized immigration.

This chapter illustrates these and other elements of existing U.S. immigration policy where reform could significantly increase immigrants' economic contributions to America's economy.

# U.S. immigration policy does not favor workers.

Significant Fact:
The U.S.
immigration
system gives
overwhelming
preference to
those applying
through family
reunification
categories.

Immigration to the U.S. is regulated by the national government. To legally enter the U.S., an immigrant must first obtain a green card or a visa. Federal law determines the number of slots available to immigrants in any given year and allocates them based on three main preference categories: family reunification, humanitarian, and employment-based.

Overwhelming preference is given to those applying to come for family reasons. In 2014, some 64 percent of immigrants coming legally to live in the U.S. permanently were approved through one of the family reunification preferences. Another 13 percent were approved for humanitarian reasons. Meanwhile only 7 percent were admitted through the employment-based preference categories, with an additional 8 percent being the family members of work-based migrants. 175

The implications of America's preference system are important because work-based immigrants often are high-skilled and provide substantial benefits to the economy. At the same time, immigrants arriving for family reunification reasons are less likely to be high-skilled and offer fewer benefits to the economy.

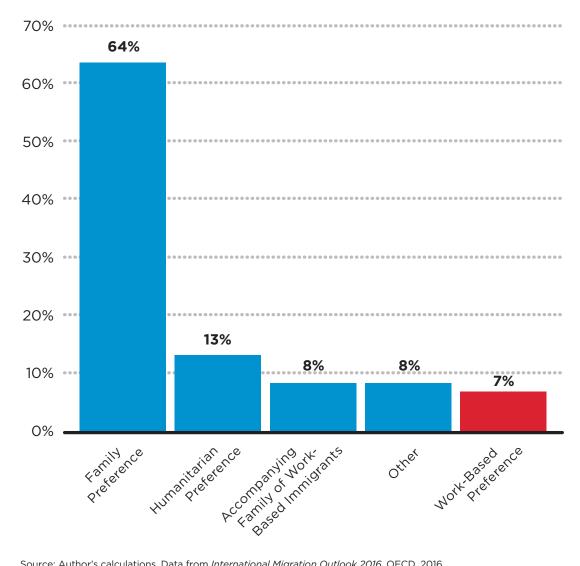
Economists Pia Orrenius and Madeline Zavodny point out that by prioritizing high-skilled work-based immigration over low-skilled family reunification immigration, the U.S. could increase the economic benefits associated with immigration while minimizing the adverse labor-market consequences and fiscal costs associated with low-skilled immigration.<sup>176</sup>

<sup>175</sup> International Migration Outlook 2016, OECD, 2016, OECD iLibrary, http://www.keepeek.com/Digital-Asset-Management/oecd/social-issues-migration-health/international-migration-outlook-2016\_migr\_outlook-2016-en#.WQzaK9LyuUk#page54.

<sup>176</sup> Pia M. Orrenius and Madeline Zavodny, *Beside the Golden Door: U.S. Immigration Reform in a New Era of Globalization* (Washington, D.C.: AEI Press, 2010).



#### Distribution of Permanent Immigrant Flows to the U.S., by Preference Category, 2014



Source: Author's calculations. Data from International Migration Outlook 2016, OECD, 2016.

## Other developed countries place more emphasis on work-based immigration.

Significant Fact: **Among OECD** countries, the U.S. places the least amount of emphasis on work-based

immigration.

While U.S. immigration policies do not favor workbased migration, many other developed countries understand they face global competition for skilled immigrant workers.

In order to remain attractive to these workers, other developed countries give preference for permanent residence status to immigrants whose primary objective is to work. In Germany, for example, some 81 percent of permanent immigrants were workers in 2014.<sup>177</sup> Immigrant workers accounted for at least 50 percent of all permanent immigrant flows in these other countries as well: Switzerland, Spain, the Netherlands, the United Kingdom, and Italy. Among major industrialized countries, the U.S. places the least emphasis on workbased migration.<sup>178</sup>

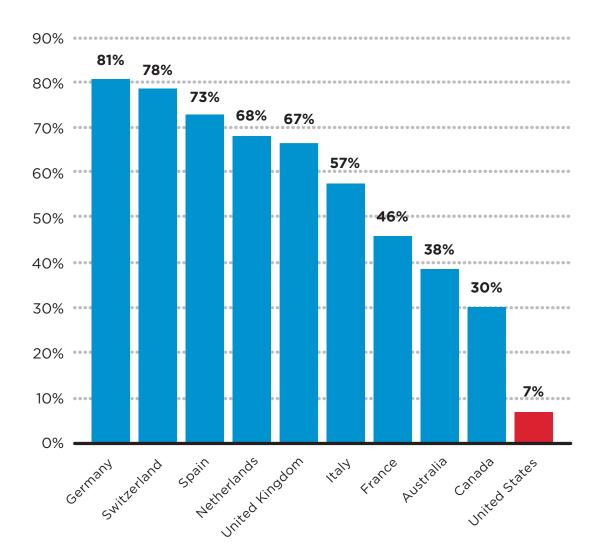
While a humane immigration system should allow for family reunification, the U.S. system's bias favoring family reunification negatively impacts economic competitiveness. Immigrants coming to the U.S. on family-based preferences are disproportionately lowskilled, with little educational training. Meanwhile, employment-based immigrants tend to be more highly educated, and are therefore more productive workers.

To be competitive in the world economy, U.S. companies need to be able to attract the best talent the world has to offer. By greatly restricting entry of the very immigrants who help drive the economy, the U.S. is unnecessarily holding itself back.

<sup>177 &</sup>quot;Free movement migrants" are included in the work-based category. 178 Author's calculations; data from International Migration Outlook 2016, OECD, 2016, OECD iLibrary, http://www.keepeek.com/ Digital-Asset-Management/oecd/social-issues-migration-health/ international-migration-outlook-2016\_migr\_outlook-2016-en#. WQzaK9LyuUk#page54.



## Work-Based Share of Permanent Immigration Flows, by Country, 2014



Source: Author's calculations. Data from International Migration Outlook 2016, OECD, 2016.

Note: "Free movement migrants" are included in the work-based category.

#### Visa programs for immigrant workers are insufficient ...

**Significant Fact:** In recent years, the statutory cap on H-1B applications has been met in the first week of the filing period.

The U.S. offers many different visa programs that admit foreign-born workers on a temporary basis. These programs are useful because many of them allow the foreign-born to augment the labor force in industries with labor shortages. However, they are insufficient to meet demand. The H-1B visa program highlights this insufficiency.

The H-1B visa program is the primary vehicle by which high-skilled foreign-born workers can work legally in the U.S. The program applies to employers in occupations that require specialized knowledge and at least a bachelor's degree.

While this program is a good one in theory, two crucial limitations impact its usefulness: its low annual cap and six-year limitation.

The current annual cap of 65,000 H-1B visas (plus another 20,000 for persons with advanced degrees from U.S. universities) is dramatically inadequate. In many years, the statutory cap on H-1B applications is met within days of the opening of the filing period. <sup>179</sup> Any cap on H-1B visas is questionable. Setting the cap as low as 65,000 is particularly misguided. After all, the H-1B visa program had no cap before 1990, and even since 1990 the cap has been higher than the current 65,000 level.<sup>180</sup> If there is to be a cap on H-1B visas, it should be tied more closely to demand for these high-skilled foreign-born workers.

The temporary nature of the H-1B program is likewise problematic. H-1B workers wanting to work in the U.S. beyond the program's maximum six-year limit must apply for permanent resident status. Yet the application

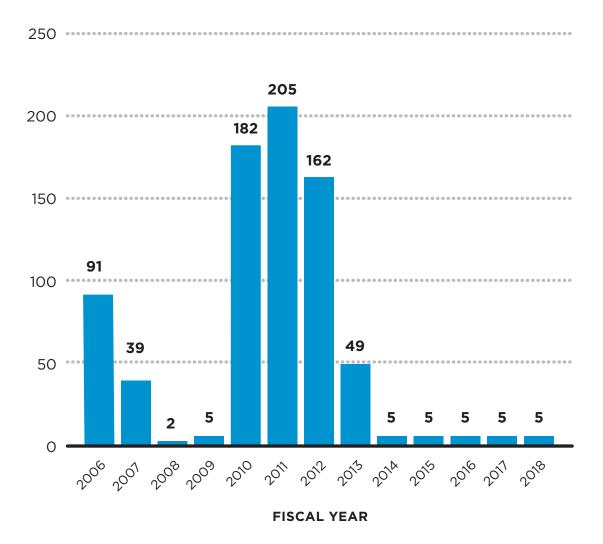
<sup>179</sup> U.S. Department of Homeland Security, U.S. Citizenship and Immigration Services, *USCIS Reaches FY 2018 H-1B Cap.* April 7, 2017. https://www.uscis.gov/news/news-releases/uscis-reaches-fy-2018-h-1b-cap; *The* H-1B Visa Program: A Primer on the Program and Its Impact on Jobs, Wages, and the Economy. Rep. American Immigration Council, https:// www.americanimmigrationcouncil.org/sites/default/files/research/the\_h-lb\_visa\_program\_a\_primer\_on\_the\_program\_and\_its\_impact\_on\_jobs\_wages\_and\_the\_economy.pdf.

<sup>180</sup> Suzette Brooks Masters and Ted Ruthizer, The H-1B Straitjacket: Why Congress Should Repeal the Cap on Foreign-Born Highly Skilled Workers, issue brief no. 7 (Washington: Cato Institute, 2000), http://object.cato.org/ sites/cato.org/files/pubs/pdf/tbp-007.pdf.

process for a green card is difficult and does not guarantee success. Thus, under current policy U.S. companies recruit and train H-1B workers, but they know that they will likely lose a seasoned employee after six years. This is not ideal for employers, H-1B workers, or the economy at large.

Reform should make it easier for skilled workers to come and remain in the U.S.

#### Business Days Required to Fill the Annual Cap on H-1B Visas, FY 2006-18



Source: U.S. Department of Homeland Security, U.S. Citizenship and Immigration Services.

# What impact does the H-1B visa program have on the economy?

The impact of the H-1B visa program is an issue of considerable debate. Many argue that by allowing highly trained foreigners to work in the U.S., the H-1B visa program enhances innovation and economic growth. This first group tends to believe that high-skilled foreign workers complement native-born workers.

Meanwhile, others believe the economic contributions of H-1B workers are minimal and that indeed the H-1B program may do more harm than good. Detractors argue that since many H-1B workers are often willing to work for less than high-skilled native-born workers, they mostly compete with native-born workers. The main impacts of the H-1B program, according to this line of thinking, are lower wages and fewer jobs for high-skilled Americans.

Which side is right? It of course is difficult to isolate the specific impact of the H-1B program, but several academic studies have looked into this question, and come to somewhat conflicting findings.

Examining variations in data by state for the period 2000–2007, the economist Madeline Zavodny finds a large positive impact from the H-1B program. According to Zavodny, during this time period, an increase of 100 H-1B workers in a state was associated with an additional 183 jobs among U.S. natives.<sup>181</sup>

Economists Giovanni Peri, Kevin Shih, and Chad Sparber (2015, *Journal of Labor Economics*) examine city-level data for the period 1990–2000 and find that H-1B workers — a large portion of whom work in science, technology, engineering, and math (known as STEM) fields — have a substantially positive effect on the wages of natives. These researchers conclude that "a 1 percentage point increase in the foreign STEM share of a city's total employment increased the wage growth of native college-educated labor by about 7–8 percentage points and the wage growth of non-college-educated natives by 3–4 percentage points." The paper finds no statistically significant effect on the employment of natives. In a separate paper, the same authors (2015, NBER) examine the impact on natives in computer-related jobs when H-1B visa requests go unfilled due to the annual H-1B visa cap. The researchers find that H-1B rationing in 2007–08 constrained tech-sector job-growth for both high- and low-skilled natives in the two years that followed. Had rationing not occurred, meaning firms could have hired the number of H-1B workers they desired,

<sup>181</sup> Madeline Zavodny, Immigration and American Jobs, American Enterprise Institute and The Partnership for a New American Economy, 15 Dec. 2011, https://www.aei.org/wp-content/uploads/2011/12/-immigration-and-american-jobs\_144002688962.pdf.

<sup>182</sup> Giovanni Peri, Kevin Shih, and Chad Sparber, "STEM Workers, H-1B Visas, and Productivity in US Cities," Journal of Labor Economics 33.S1 (2015): 225-55. JSTOR. Web. 13 Mar. 2017.



both wage and employment growth for natives would have been stronger in the years that followed.<sup>183</sup>

Yet other researchers reach a different conclusion.

Economists Kirk Doran, Alexander Gelber, and Adam Isen analyzed firms that were and were not able to secure H-1B visas in 2006 and 2007 — years when the visas were subject to a lottery due to high demand. They find that securing H-1B visas had insignificant effects on a firm's patenting activity, suggesting that H-1B workers may not contribute as much to innovation as many believe. Furthermore, the researchers conclude that additional H-1B visas "substantially crowd out firms' employment of other workers," and may lead to lower average employee earnings. They do find that securing H-1B visas was associated with higher firm profits. <sup>184</sup>

Research by economists John Bound, Gaurav Khanna, and Nicolas Morales largely support these findings. Examining the eight-year period from 1994 to 2001, these researchers find that had high-skilled immigration levels remained at their 1994 level throughout the period, by 2001 the wages of native-born computer scientists would have been up to 5.1 percent higher and employment levels of natives in computer science would have been up to 10.8 percent higher. Even so, the researchers do find that American consumers benefited from the presence of H-1B workers through lower prices and increased output in IT goods. <sup>185</sup>

It is difficult to account for the rather substantial differences in the academic literature. But it is important to keep in mind that the various studies discussed here examine different time periods and utilize different data sets and methodologies. Despite the differences, it is clear that the supply of available H-1B visas is significantly below the level desired by high-skilled immigrants and U.S. firms that would like to hire them. Firms tend to make hiring decisions that maximize their productivity, which ultimately benefits the economy and consumers at large, even if some workers in the industry are adversely impacted. Policymakers would be wise to keep this in mind as they consider changes to the H-1B visa program.

<sup>183</sup> Giovanni Peri, Kevin Shih, and Chad Sparber, Foreign and Native Skilled Workers: What Can We Learn from H-1B Lotteries? Working paper no. 21175, Cambridge: National Bureau of Economic Research, 2015.

<sup>184</sup> Kirk Doran, Alexander Gelber, and Adam Isen, *The Effects of High-Skilled Immigration Policy on Firms: Evidence from H-1B Visa Lotteries*, Working paper no. 20668, Cambridge: National Bureau of Economic Research, 2014.

<sup>185</sup> John Bound, Gaurav Khanna, and Nicolas Morales, *Understanding the Economic Impact of the H-1B Program on the U.S.*, Working paper no. 23153, Cambridge: National Bureau of Economic Research, 2017.

#### ... And the 7 percent per-country quota makes matters worse.

Significant Fact: **U.S. immigration** policy dictates that citizens of any single country can receive no more than 7% of total U.S. visas awarded in a given year.

The U.S. federal government places a per-country limit of 7 percent on the total number of family-sponsored and employment-based preference visas available in any given year. 186 This per-country limit was established with the intention of encouraging fairness, so that no single country would dominate immigration to the U.S.

However, in reality, the quota is anything but fair. Countries like China and India, with populations over 1 billion each, have access to the same maximum number of U.S. visas — approximately 25,600 — as Lithuania, a small country with a total population of around 2.8 million.<sup>187</sup>

The 7 percent quota policy makes no economic sense either. When it comes to allocating scarce visas, the efficient thing to do would be to allocate the visas to individuals with the greatest demand, or the most potential to benefit America, regardless of where they were born. The current system, with its 7 percent limit, however, makes this impossible.

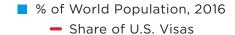
A situation thus exists where countries like Mexico, China, and India — whose citizens tend to have high demand for U.S. visas -- face severe visa shortages. Yet at the same time, as U.S. Citizenship and Immigration Services acknowledges, "most countries do not reach [the 7 percent] level of visa issuance."188

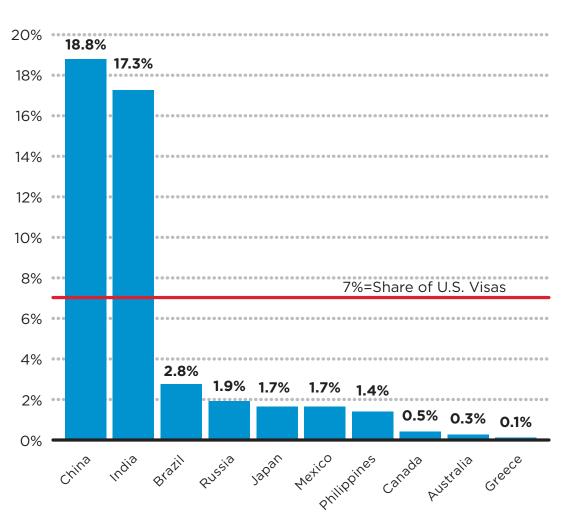
This is not to say that visa allocation should necessarily be proportional to a country's population size. Rather, visas should be allowed to be allocated to those individuals with the greatest demand and most potential to benefit the U.S. Why should nationality block them from coming to the U.S. if they are otherwise qualified? Reform that aligns visa supply more closely to demand

- 186 The maximum 7 percent per-country quota does not mean every country in the world is guaranteed 7 percent of the total employment-based and family-based visas made available by the U.S. federal government in a given year. Rather, it is a maximum, meaning no country can receive more than 7 percent of the total.
- 187 Central Intelligence Agency, The World Factbook, Country Comparison: Population, https://www.cia.gov/library/publications/the-world-factbook/ rankorder/2119rank.html.
- 188 U.S. Department of Homeland Security, U.S. Citizenship and Immigration Services, Per Country Limit, http://www.uscis.gov/tools/glossary/country-

and immigrant skill level would do much to rationalize America's immigration system and produce better outcomes.

All Countries Face the Same 7% Maximum Cap on U.S. Visas, Regardless of the Size of Their Populations





Source: Author's calculations, population data from Central Intelligence Agency, The World Factbook.

## Millions of would-be immigrants are stuck in lengthy queues ...

**Significant Fact: As of November** 2016, an estimated 4.37 million would-be immigrants with approved visas were waiting for a visa to become available to them.

America's immigration system has created a situation where millions of immigrants find themselves stuck in legal limbo.

As of November 2016, an estimated 4.37 million would-be immigrants worldwide were waiting for a visa to become available. 189 The reason for the backlog, of course, is that each year thousands more foreigners apply for visas than there are available slots according to statutory limits and visa preference categories. The cumbersome 7 percent per-country quota causes further delays for those applying from countries where U.S. visas are in high demand. For example, in November 2016, Mexico had 1.3 million would-be immigrants on waiting lists for visa processing — by far the most of any country in the world.

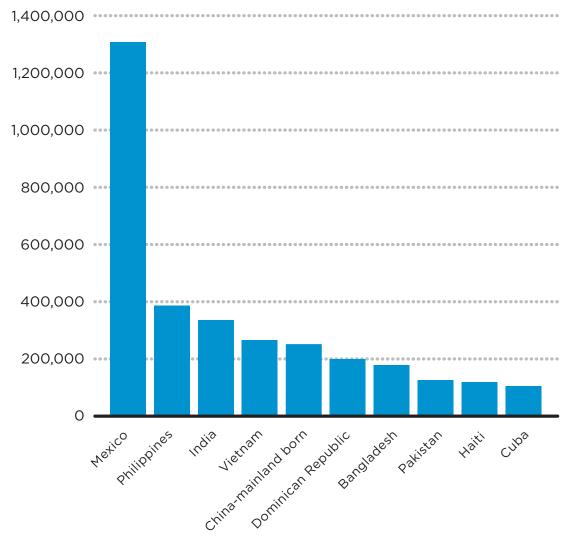
But other countries also have thousands stuck in the U.S. immigration backlog. More than 387,000 Filipinos, more than 331,000 Indians, more than 266,000 Vietnamese, and more than 252,000 from mainland China were waiting in 2016. The Dominican Republic, Bangladesh, Pakistan, Haiti, and Cuba each also had more than 100,000 waiting in line. 190

<sup>189</sup> Note, this does not mean 4.37 million were waiting for processing and a decision on their visa application. Rather, the 4.37 million had already had their visa application approved, but due to visa caps were waiting for a visa to become available to them.

<sup>190</sup> U.S. Department of State, Annual Report of Immigrant Visa Applicants in the Family-sponsored and Employment-based Preferences Registered at the National Visa Center as of November 1, 2016, 2016, https://travel.state.gov/ content/dam/visas/Statistics/Immigrant-Statistics/WaitingListItem.pdf.



#### Number of People on U.S. Visa Waiting List, by Country, November 2016



Source: U.S. Department of State, Annual Report of Immigrant Visa Applicants in the Family-sponsored and Employment-based Preferences...

Note: The 10 countries with the most people on the U.S. visa waiting list are included in the chart.

## ... And some immigrants must wait decades to clear the queues ...

**Significant Fact:** In the most extreme cases, some immigrants must wait more than 20 years for their visas and green cards to process.

The average wait time before immigrants clear the queues can stretch decades. This is particularly true for immigrants applying from countries with high demand for U.S. visas and green cards.

For example, Mexicans who applied in certain family-preference categories in 1995 were finally being processed in 2017. The average wait for siblings of adult U.S. citizens from the Philippines was even longer: a mind-boggling 23 years. 191 To give some perspective, the 22-year wait is more than one-fourth the average life expectancy for Mexicans and the 23-year wait for Filipinos represents one-third of their average life expectancy. 192

Wait times for those wishing to enter on employment-based preferences can stretch for years as well. As the chart on the next page shows, Chinese workers and Indian workers with advanced degrees wait approximately four and nine years, respectively, for their current priority dates to arrive. 193

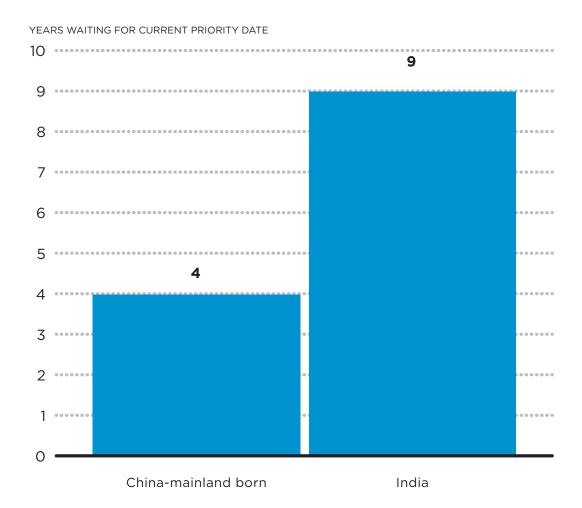
<sup>191</sup> U.S. Department of State, Bureau of Consular Affairs, Visa Bulletin for May 2017, vol. X, no. 69 (Washington: U.S. Department of State, 2017), https:// travel.state.gov/content/visas/en/law-and-policy/bulletin/2017/visabulletin-for-may-2017.html.

<sup>192</sup> Life expectancy data from Central Intelligence Agency, The World Factbook: Life Expectancy at Birth, https://www.cia.gov/library/publications/the-world-factbook/rankorder/2102rank.html.

<sup>193</sup> U.S. Department of State, Bureau of Consular Affairs, Visa Bulletin for May 2017, vol. X, no. 69 (Washington: U.S. Department of State, 2017), https:// travel.state.gov/content/visas/en/law-and-policy/bulletin/2017/visabulletin-for-may-2017.html.



# Years Spent Waiting for a Current Priority Date, Applicants from China and India Using Employment-Based Second Preference Category, May 2017



APPLICANTS WITH ADVANCED DEGREES

Source: U.S. Department of State, Bureau of Consular Affairs, Visa Bulletin for May 2017.

Note: The employment-based second preference category is for: "Members of the Professions Holding Advanced Degrees or Persons of Exceptional Ability."

#### ... This drives many high-skilled immigrants to leave the U.S.

**Significant Fact:** 

**Among immigrants** who had earned doctorates in science and engineering disciplines in 2006, only 66% of them remained in the U.S. five years later.

It is already well documented that a large share of immigrants who earn doctoral degrees in critical fields like science and engineering end up leaving the U.S. upon graduation. Among immigrants who had earned doctorates in science and engineering disciplines in 2006, only 66 percent of them remained in the U.S. in  $2011.^{194}$ 

Evidence suggests many would prefer to stay in the U.S., but unworkable U.S. immigration laws make it nearly impossible.

Research by Vivek Wadhwa, distinguished fellow at Carnegie Mellon University, estimates that "up to 1.5 *million* skilled immigrants and their families [...] are trapped in the limbo between H1-B and the green card that earns them permanent residence and the chance for citizenship" (emphasis in original). Wadhwa believes this bureaucratic limbo has discouraged many high-skilled immigrants and led them to emigrate from the U.S. The number of new high-tech companies started by immigrants in Silicon Valley has stagnated in recent years, and Wadhwa believes an exodus of highly trained immigrants frustrated with U.S. immigration laws is a main culprit.<sup>195</sup>

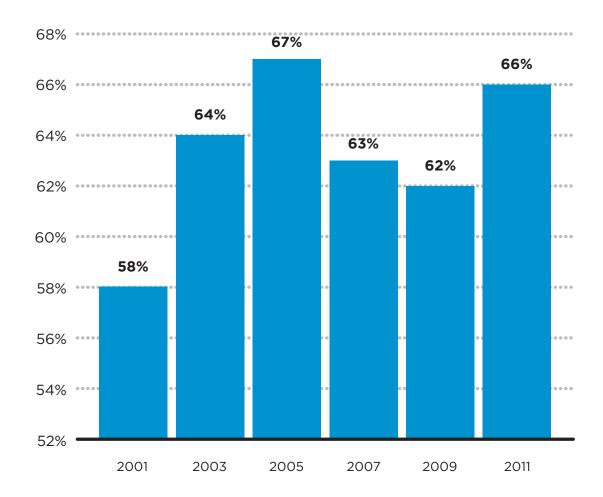
Highly trained foreign workers have increasingly more options for employment around the world. U.S. policies that make it difficult for these foreign-born workers to come to the U.S. and work harm America's competitiveness.

<sup>194</sup> Michael G. Finn, *Stay Rates of Foreign Doctorate Recipients from U.S. Universities, 2011*, report (National Science Foundation, 2014), http://orise.orau.gov/files/sep/stay-rates-foreign-doctorate-recipients-2011.pdf.

<sup>195</sup> Michael S. Malone, "The Self-Inflicted U.S. Brain Drain," editorial, The Wall Street Journal (New York), October 16, 2014, Opinion sec., http:// online.wsj.com/articles/michael-s-malone-the-self-inflicted-u-s-braindrain-1413414239.



Five-Year Stay Rates for Foreign-Born Recipients of U.S. Science and Engineering Doctoral Degrees with Temporary Visas at Graduation, Selected Years 2001-11



Source: Michael G. Finn, Stay Rates of Foreign Doctorate Recipients from U.S. Universities.

## Reducing constraints on green cards and H-1B visas could add billions to the economy.

Significant Fact:
Policy changes
to retain highly
skilled workers
could boost U.S.
GDP and lead
to increased tax
revenues.

The loss of highly educated workers has serious economic consequences.

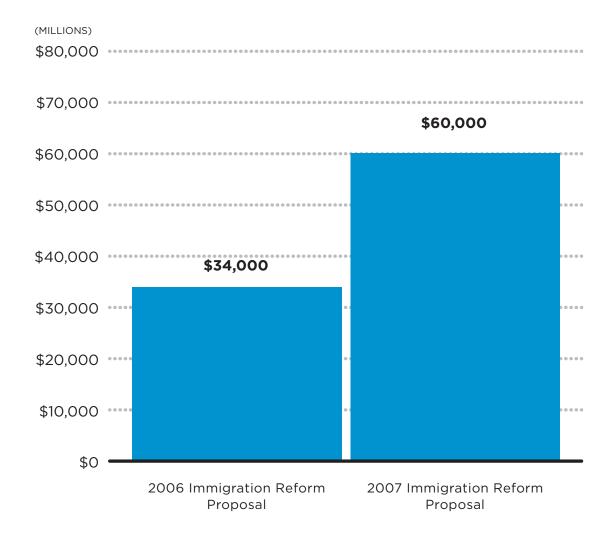
A 2009 study by Arlene Holen, a former Congressional Budget Office official, estimates that 182,000 foreign-born graduates of U.S. universities with STEM degrees and another 300,000 workers on H-1B visas would have remained in the U.S. over the period 2003–07 had constraints on H-1B visas and green cards been relaxed. Taken together, these lost workers would have earned approximately \$37 billion in 2008 and contributed approximately \$7 billion to \$10 billion in additional federal tax revenue.

Furthermore, Holen analyzed the probable effects of the comprehensive immigration reform bills proposed, but not passed, in 2006 and 2007. As the chart shows, she finds in the tenth year following enactment, the 2006 bill could have increased GDP by \$34 billion and the 2007 bill could have increased GDP by as much as \$60 billion. <sup>196</sup> While these amounts may seem small in relation to total U.S. GDP of around \$18.5 trillion in 2016, in an era of sluggish economic performance, immigration reform represents one avenue for accelerated growth.

<sup>196</sup> Arlene Holen, *The Budgetary Effects of High-Skilled Immigration Reform*, report (Washington: Technology Policy Institute, 2009), http://www.techpolicyinstitute.org/files/the%20budgetary%20effects%20of%20high-skilled%20immigration%20reform.pdf.



# Estimated Gains to GDP in the Tenth Year Following Enactment of the 2006 and 2007 Comprehensive Immigration Reform Bills



Source: Holen, 2009.

Note: The 2006 and 2007 comprehensive immigration reform bills never became law. These figures of \$34 billion and \$60 billion reflect estimates of the increase in GDP 10 years following the hypothetical passage of each respective bill.

#### Lesser-skilled visa programs also need revamping.

**Significant Fact: Existing** temporary visa programs for lesser-skilled foreign-born workers are rarely used because they are overly complicated and

costly.

Visa programs also exist to give lesser-skilled workers temporary access to work in the U.S. The two main programs for lesser-skilled immigrants are the H-2A visa program, for agricultural workers, and the H-2B visa program, for non-agricultural workers.

U.S. agriculture is highly dependent on the foreign-born. In any given year, U.S. farmers employ approximately 1.1 million hired crop farmworkers, 197 and the foreign-born account for approximately 70 percent of the total. 198 In theory, the H-2A program could be of great use to farmers, providing them a system to legally hire lesser-skilled foreign-born workers. However, in reality, the H-2A program is so bureaucratic and costly that it is rarely used.

The result: extraordinarily high levels of unauthorized immigration. As the graph on the next page shows, in FY 2015 there were just fewer than 140,000 H-2A certifications made by the Labor Department.<sup>199</sup> Meanwhile, approximately 500,000 hired farmworker jobs were filled by unauthorized immigrants.<sup>200</sup>

Immigrants coming to fill these types of temporary, lesser-skilled jobs make up a large portion of America's unauthorized immigrant population. A robust guest worker program that is responsive to labormarket demand would help employers, immigrants, and the economy while also doing much to reduce unauthorized immigration to America.

<sup>197</sup> U.S. Department of Agriculture, Economic Research Service, *Immigration and the Rural Workforce*, 3 Feb. 2017, https://www.ers.usda.gov/topics/inthe-news/immigration-and-the-rural-workforce/.

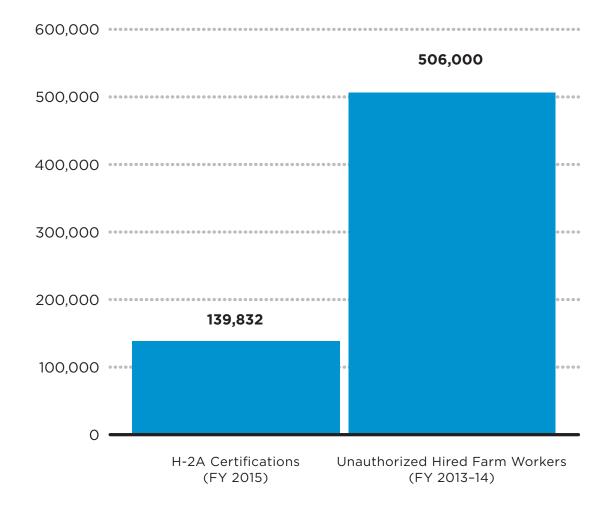
<sup>198</sup> U.S. Department of Labor, The National Agricultural Workers Survey, Table 1: National Demographic Characteristics. 13 Jan. 2017. https://www.doleta. gov/agworker/naws.cfm#d-tables.

<sup>199</sup> U.S. Department of Labor, Office of Foreign Labor Certification, *Annual Report 2015*, 1 Nov. 2016, https://www.foreignlaborcert.doleta.gov/pdf/OFLC\_Annual\_Report\_FY2015.pdf.

<sup>200</sup> U.S. Department of Agriculture, Economic Research Service, Immigration and the Rural Workforce, 3 Feb. 2017, https://www.ers.usda.gov/topics/ in-the-news/immigration-and-the-rural-workforce/; and U.S. Department of Labor, The National Agricultural Workers Survey, Table 1: National Demographic Characteristics. 13 Jan. 2017. https://www.doleta.gov/ agworker/naws.cfm#d-tables.



#### Number of H-2A Visa Certifications vs. Number of Unauthorized Farm Workers, 2009



Sources: U.S. Department of Labor, Office of Foreign Labor Certification, *Annual Report 2015*; U.S. Department of Agriculture, Economic Research Service, *Immigration and the Rural Workforce*, 3 Feb. 2017, https://www.ers.usda.gov/topics/in-the-news/immigration-and-the-rural-workforce/; U.S. Department of Labor, The National Agricultural Workers Survey, *Table 1: National Demographic Characteristics*. 13 Jan. 2017. https://www.doleta.gov/agworker/naws.cfm#d-tables.

Note: The number of unauthorized farmworkers is estimated by the author relying on data that suggest 46 percent of hired farmworkers in the U.S. were unauthorized in FY 2012-13, and that the total population of hired farmworkers in FY 2012 was 1,100,000.

# Chapter 6: Higher Economic Growth through Immigration



## With more immigrants in the U.S., Americans would be more likely to finish high school.

#### **Significant Fact:**

An increase in immigration creates a positive incentive for natives to gain more education.

One widely unknown benefit of immigration is the positive effect immigrants have on the educational attainment of natives.

Research by the economist Jennifer Hunt (2012) finds that when more immigrants are present in the population, natives are more likely to complete high school. Specifically, Hunt's research finds that "an increase of one percentage point in the share of immigrants in the population aged 11–64 increases the probability that natives aged 11–17 eventually complete 12 years of schooling by 0.3 percentage points."<sup>201</sup>

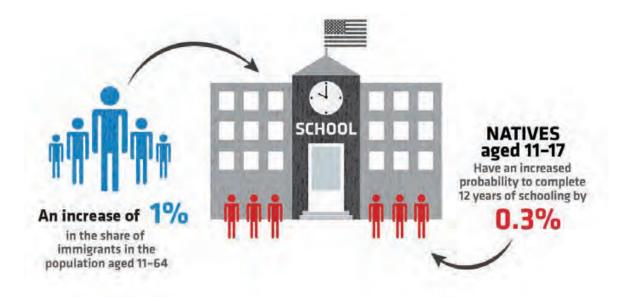
To be sure, an influx of immigrants can adversely affect the education of natives when they compete with each other for limited educational resources. Hunt does find evidence of this effect.

However, paradoxically, the very competition created from an influx of immigrants provides a strong incentive for natives to gain more education. That is to say, natives without much education realize that by gaining more schooling they will become better job candidates and therefore rise above the competition they face from new immigrants. Hunt finds that this strong incentive to gain more education is the dominant effect at work. The net effect is that immigrants help boost the educational attainment of natives.

<sup>201</sup> Jennifer Hunt, The Impact of Immigration on the Educational Attainment of Natives, working paper no. 18047 (Cambridge: National Bureau of Economic Research, 2012).



"An increase of one percentage point in the share of immigrants in the population aged 11-64 increases the probability that natives aged 11-17 eventually complete 12 years of schooling by 0.3 percentage points."



Source: Hunt, 2012.

### More immigrants would help support entitlement programs.

Significant Fact: **Immigrants** alone cannot solve the problems confronting Social Security, but, on average, immigrants do help the solvency of that program.

Social Security relies on the earnings of current workers to fund the pensions of retirees. As America's large "baby boom" generation reaches retirement age, the ratio of workers to retirees will shrink. In fact, the number of retirees is expected to almost double over the next 30 years.

According to the Social Security Administration (SSA), in 1965, there were 4.0 workers for every Social Security beneficiary.<sup>202</sup> But by 2014 the ratio had fallen to 2.8:1, and the imbalance is expected to worsen in coming years. By 2034, the Social Security Trust Fund reserves are expected to be depleted.<sup>203</sup>

Immigration alone cannot solve the problems confronting Social Security. On average, however, immigrants do help the solvency of the program. There are two main reasons for this. First, as is shown in the chart, immigrants have a significantly higher fertility rate than natives. In 2014, foreign-born women had a fertility rate of 84.2 births per thousand women aged 15–44 years, compared to only 58.3 births per thousand native women.<sup>204</sup> Increasing the fertility rate helps future generations of retirees, since when it is their turn to retire, there will be more workers to support them.

Second, immigrants are good for Social Security because they are much more likely than natives to be of working age. Data show that in 2015, 72.4 percent of immigrants were between the ages of 25 and 64 (working age), compared to only 49.3 percent of nativeborn citizens. <sup>205</sup> Since immigrants also join the labor force and are employed at high rates, they help stabilize the worker-to-beneficiary ratio. Overall, according to a

<sup>202</sup> U.S. Social Security Administration, *Ratio of Covered Workers to Beneficiaries*, http://www.ssa.gov/history/ratios.html.

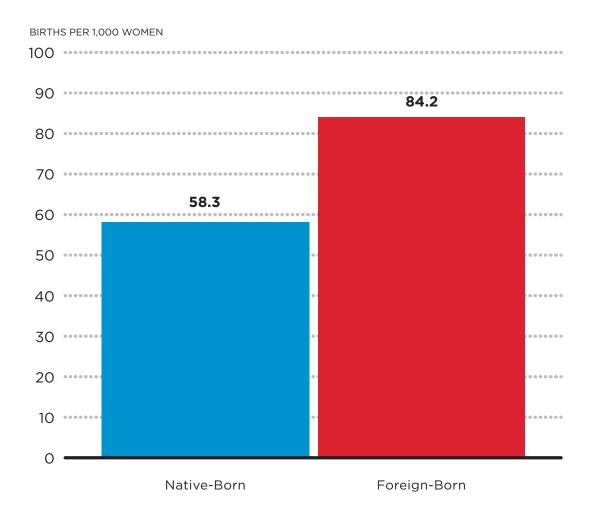
<sup>203</sup> Social Security Administration, The 2015 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, Washington: U.S. Government Publishing Office, 2015, https://www.ssa.gov/oact/tr/2015/tr2015.pdf.

<sup>204</sup> Gretchen Livingston, *Births Outside of Marriage Decline for Immigrant Women*, Washington, D.C.: Pew Research Center, 2016, http://www.pewsocialtrends.org/2016/10/26/growth-in-annual-u-s-births-since-1970driven-entirely-by-immigrant-moms/

<sup>205</sup> U.S. Census Bureau, 2015 American Community Survey.

2008 study by Paul Van der Water, "an increase in net-immigration of 300,000 persons would eliminate about one-tenth of Social Security's 75-year deficit." <sup>206</sup>

#### Number of Births per 1,000 Women (Ages 15-44) During the Previous 12 Months, 2014



Source: Gretchen Livingston, *Births Outside of Marriage Decline for Immigrant Women*, Washington, D.C.: Pew Research Center, 2016.

<sup>206</sup> Paul N. Van De Water, *Immigration and Social Security*, report (Washington, D.C.: Center on Budget and Policy Priorities, 2008), http://www.cbpp.org/files/11-20-08socsec.pdf.

## More immigrants would boost property values in America's cities.

Significant Fact:
Immigrants are
an important
component
of urban
revitalization
because they
help raise

property values.

Property values are one indicator of the economic health of a city. High property values signal a desirable place to live and work, while low property values suggest an area is less attractive.

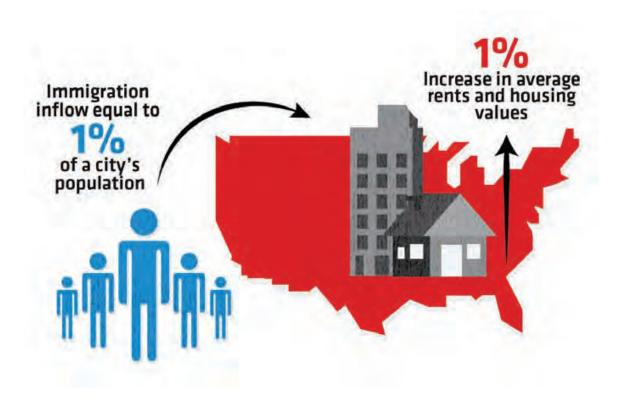
Research by the economist Albert Saiz finds that an inflow of immigrants increases the demand for housing and thus raises property values. While an increase in demand almost always leads to higher prices, it is not a foregone conclusion. If new immigrants displace native-born citizens from a city, one would expect to find falling house prices.

However, Saiz finds convincing evidence that immigrants do not displace natives on a one-to-one basis, and that in fact "an immigration inflow equal to 1 percent of a city's population is associated with increases in average rents and housing values of about 1 percent." Saiz concludes that this positive impact from immigration is of a larger magnitude than the impact of immigrants on other areas of the economy.<sup>207</sup>

207 Albert Saiz, "Immigration and Housing Rents in American Cities," *Journal of Urban Economics* 61, no. 2 (2007).



"An immigration inflow equal to 1% of a city's population is associated with increases in average rents and housing values of about 1%."



Source: Saiz, 2007.

### More immigrants would mean a rise in patents.

**Significant Fact:** 

With more foreign-born graduate students studying in America, the U.S. would benefit from a substantial increase in patents.

Research by Gnanaraj Chellaraj et al. (2008) suggests that augmenting the share of foreign-born graduate students studying at U.S. universities would further increase U.S. patenting. In fact, a 10 percent increase in the number of foreign-born graduate students is associated with a 4.5 percent increase in U.S. patent applications. Additionally, patent grants (patents actually awarded) would increase by 5 percent in non-university institutions, while university-based patent grants would rise 6.8 percent. The researchers rightly warn that "reductions in foreign graduate students from visa restrictions could significantly reduce US innovative activity."<sup>208</sup>

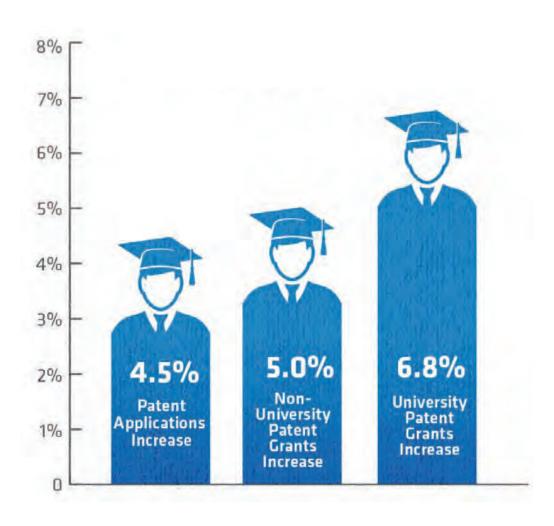
More skilled immigrants among the general population would also increase U.S. patenting. Jennifer Hunt and Marjolaine Gauthier-Loiselle find that "a one percentage point rise in the share of immigrant college graduates in the population increases patents per capita by 6 [percent]." Hunt and Gauthier-Loiselle also find that immigrants do not crowd out native inventors. Rather, immigrant inventors have a positive effect on native inventors: Patents per capita increase "about 15 [percent] in response to a one percentage point increase in immigrant college graduates." <sup>209</sup>

<sup>208</sup> Gnanaraj Chellaraj, Keith E. Maskus, and Aaditya Mattoo, "The Contribution of International Graduate Students to US Innovation," *Review of International Economics* 16, no. 3 (2008).

<sup>209</sup> Jennifer Hunt and Marjolaine Gauthier-Loiselle, "How Much Does Immigration Boost Innovation?" *American Economic Journal:*Macroeconomics, American Economic Association 2, no. 2 (2010).



## Effects of a 10% Increase in the Number of Foreign-Born Graduate Students



Source: Chellaraj et al., 2008.

### More immigrants would mean more U.S. exports.

**Significant Fact:** 

**Immigrant-**

owned

businesses are

much more

likely to be

exporters

compared to

firms owned

by native-born

Americans.

Strong international trade is essential for a country's economy to remain competitive in today's globally linked world. Historically the U.S. has been a leader in trade, and the benefits of this international engagement have been enormous.

Matthew J. Slaughter estimates that international trade has boosted annual U.S. income by at least ten percentage points relative to what it would have otherwise been in the absence of trade. In 2013, this ten-point boost to GDP translated into an average gain of \$13,600 per household per year.<sup>210</sup>

Immigrant-owned U.S. businesses play an important role in expanding America's trade. The 2007 Survey of Businesses found that immigrantowned businesses were much more likely to be exporters compared to firms owned by native-born Americans. And comparing just businesses that do export, immigrant-owned businesses tend to export to a greater extent. In fact, exports totaled at least 50 percent of total annual sales at 2.2 percent of immigrant-owned U.S. businesses, but the same was true at only 0.8 percent of businesses owned by nativeborn Americans.<sup>211</sup>

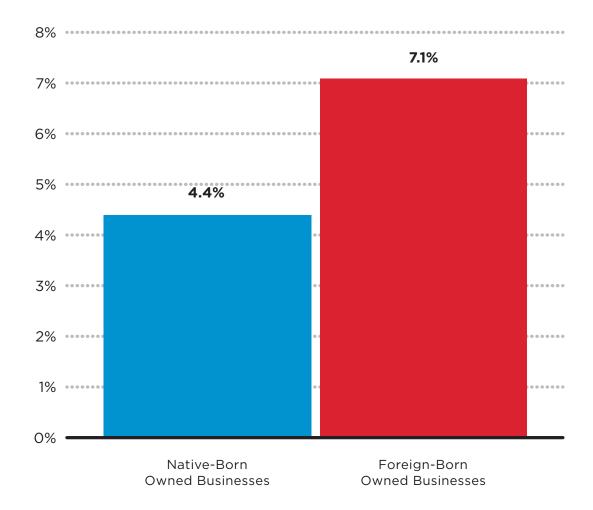
Immigrants may have an innate advantage when it comes to exporting. After all, to break into an overseas market, a business must offer products that people in those markets want to buy. A successful exporter must also understand the language, culture, and business practices of a foreign market. Immigrants bring with them unique knowledge of all these things, helping their own businesses succeed and helping the U.S. economy build stronger international ties.

<sup>210</sup> Matthew J. Slaughter, How America Is Made for Trade, report (Washington: HSBC Bank, 2014), http://images.cmbinsight.hsbc.com/Web/HsbcUsalnc/%7B8e7c7a72-1fec-484c-9785-268ab6234358%7D\_MFT\_DC\_ Report\_Digital\_Final.pdf.

<sup>211</sup> Robert W. Fairlie, Immigrant Entrepreneurs and Small Business Owners, and Their Access to Financial Capital, report (Washington: United States Small Business Administration, 2012), https://www.sba.gov/sites/default/files/ rs396tot.pdf.



U.S. Businesses That Export, Owned by Foreign-Born and by Native-Born, 2007



Source: Fairlie, 2012.

## Pro-growth immigration reform would have boosted GDP growth in past decades.

Significant Fact:

If the U.S.

had adopted
a pro-growth
immigration
policy
framework in the
1960s, real GDP
growth would
have been
substantially
higher in
subsequent
years.

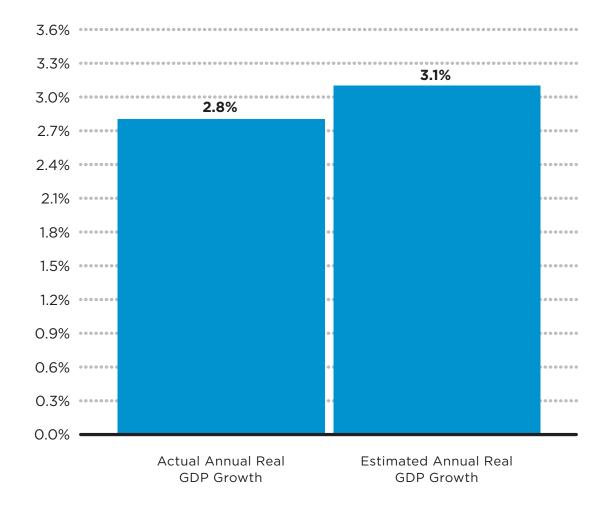
The last major overhaul of the U.S. immigration system was the Immigration and Nationality Act of 1965. This act, signed into law by President Lyndon B. Johnson, removed the national origins formula that had been in use since the 1920s and adopted in its place a preference system for admitting immigrants. This preference system is the one largely still intact today, favoring immigrants with existing family relationships in the U.S. over immigrant skill levels.

The economist Richard Vedder has estimated what inflation-adjusted GDP growth might have been in the decades following the 1965 Act, had that law expanded immigration to a greater extent and given more weight to the skill-based preferences. Inflation-adjusted growth in GDP averaged 2.8 percent per year between 1970 and 2011. However, with a progrowth immigration system in place, Vedder estimates economic growth would have been significantly higher, with average growth rates of 3.1 percent in those years. The difference between a 2.8 percent and a 3.1 percent growth rate is substantial when considered over the course of three decades. At the higher 3.1 percent rate, U.S. GDP would have been approximately \$2 trillion greater by 2011.<sup>212</sup>

<sup>212</sup> Richard Vedder, *Invisible Hands: Immigration and American Economic Growth*, report (Dallas: George W. Bush Institute, 2013), http://www.bushcenter.org/sites/default/files/Invisible%20Hands%20--%20 Immigration%20and%20American%20Economic%20Growth.pdf.

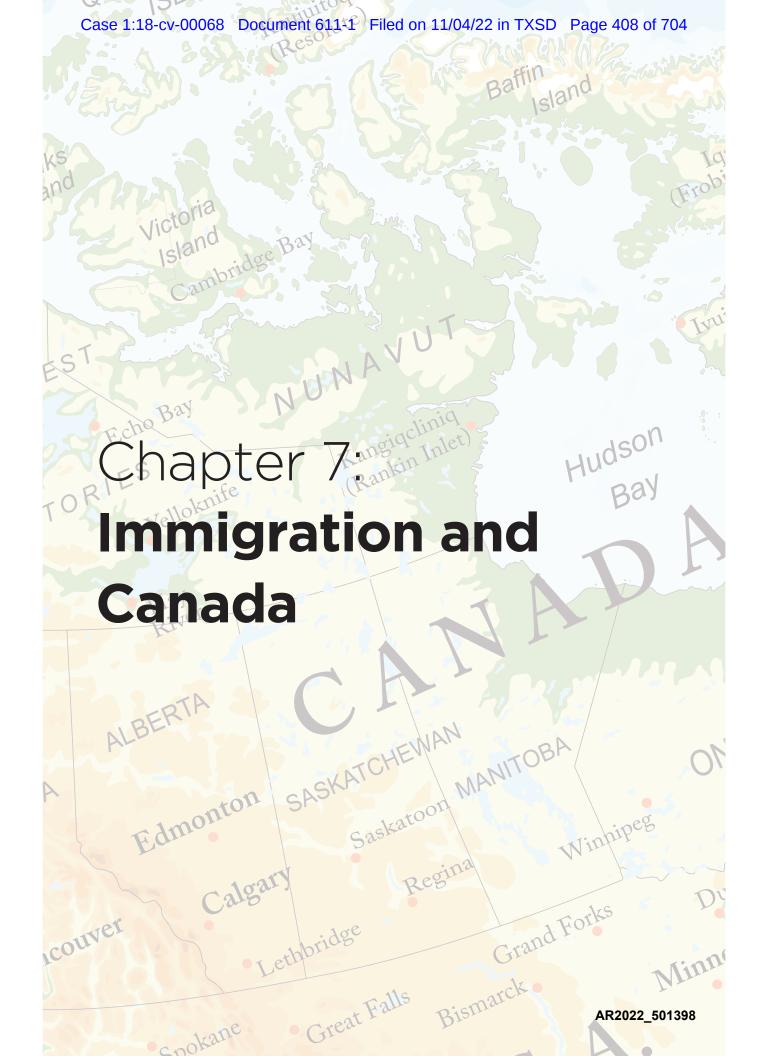


#### Actual and Estimated Annual U.S. GDP Growth Rates, 1970–2011



Source: Richard Vedder, Invisible Hands: Immigration and American Economic Growth.

Note: "Actual Annual GDP Growth" is the average annual real U.S. GDP growth rate for the period 1970-2011. "Estimated Annual GDP Growth" is the estimated average annual real U.S. GDP growth rate for the period 1970-2011 that the U.S. could have achieved if the immigration reform legislation passed in 1965 had increased immigration levels substantially.





#### **Immigration and Canada**

Canada has considerable experience with immigration. Nearly
8 million immigrants call Canada home, accounting for approximately
22 percent of Canada's population. This is a significantly higher share
than in the U.S. and other G-8 member countries, even if the sheer
number of immigrants is less.

This chapter offers a broad examination of immigration in Canada. The data in this chapter relate to immigrants in Canada, not Canadian-born immigrants in the U.S. Studying immigration in Canada highlights features of the Canadian system worthy of consideration by U.S. policymakers.

First, Canada's work-based focus is a good guide. Whereas America's system gives greatest preference to family reunification, Canada uses a merit-based point system that considers prospective immigrants' ability to contribute to the Canadian economy when determining which applicants will be approved. Canada's system also contains features that allow for temporary migrants to come and fill jobs where labor shortages exist.

Another interesting feature of Canada's system is that it allows provincial-level governments to nominate prospective immigrants to work and live in their regions as permanent residents. The U.S. does not give any similar authority to the states. Yet, since regional governments are more likely to understand their own regions' labor needs, delegating some authority in this way may help leverage immigration to better respond to labor market demand.

This chapter is not intended to be an exhaustive comparative study of the two countries' immigration systems. Rather, it provides the basic data to help understand the Canadian model. An examination of this data suggests there is certainly much to be learned from America's northern neighbor when it comes to immigration.

# Immigrants represent a significant portion of Canada's population.

**Significant Fact:** 

Canada is the most immigrant-intensive of all G-8 countries.

According to the United Nations, approximately 7.8 million international migrants lived in Canada in 2015, representing 3.2 percent of all immigrants worldwide. This ranks Canada as the seventh most popular destination of all worldwide immigrants.<sup>213</sup>

As is shown in the chart on the next page, the foreign-born presence in Canada has grown considerably over the past two and a half decades. In 1990, immigrants accounted for some 15.7 percent of Canada's population. A decade later, in 2000, immigrants represented 18.0 percent of the population; their share of the population grew to 20.5 percent by 2010. In 2015, approximately 21.8 percent of Canada's population was foreign-born, meaning that more than one out of every five people in Canada was an immigrant. This level of immigrant representation is greater than that of any other G-8 country.<sup>214</sup> Indeed, if the U.S. had the same percentage of foreign-born as Canada, the U.S. would have had some 70.1 million immigrants in 2015 instead of the 43.3 million it had in reality.

Immigrants have played an important role in the growth of Canada's overall population. Canada's total population grew by around 8.3 million people between 1990 and 2015. Immigrants accounted for more than 3.5 million of that increase, or the equivalent of some 42 percent of total population growth.<sup>215</sup>

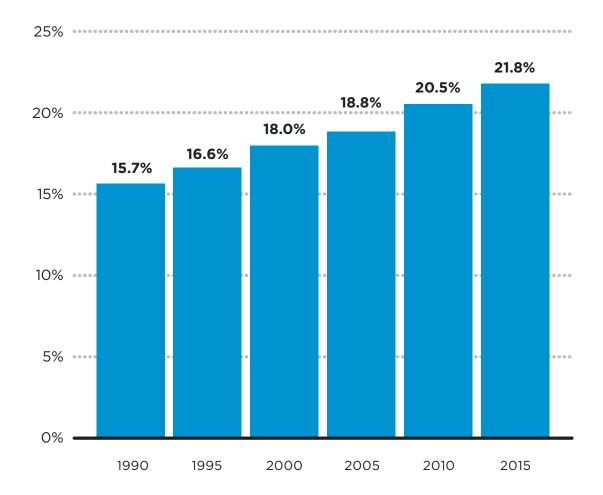
<sup>213</sup> Author's calculations, data from *Trends in International Migrant Stock: The* 2015 Revision, report (United Nations, Department of Economic and Social Affairs, 2015).

<sup>214</sup> Ibid.

<sup>215</sup> Ibid



#### Canada: Foreign-Born Share of Total Population, 1990–2015



Source: United Nations, Trends in International Migrant Stock: The 2015 Revision.

### **Immigrants to Canada are** increasingly likely to have been born in Asia.

Significant Fact:

Nearly 60 percent of immigrants who arrived in Canada during the two decades

from 1991 to

Asia.

2011 came from

Historically, immigrants have primarily come to Canada from European countries. Indeed, data collected in 2011 show that nearly 80 percent of immigrants who arrived in Canada prior to 1971 were previously citizens of a European country. Yet the European share of Canada's immigrant population has shrunk in more recent decades, with only 13.7 percent of immigrants arriving to Canada between 2006 and 2011 coming from Europe.

As European migration to Canada has waned, migration from Asia has grown considerably.

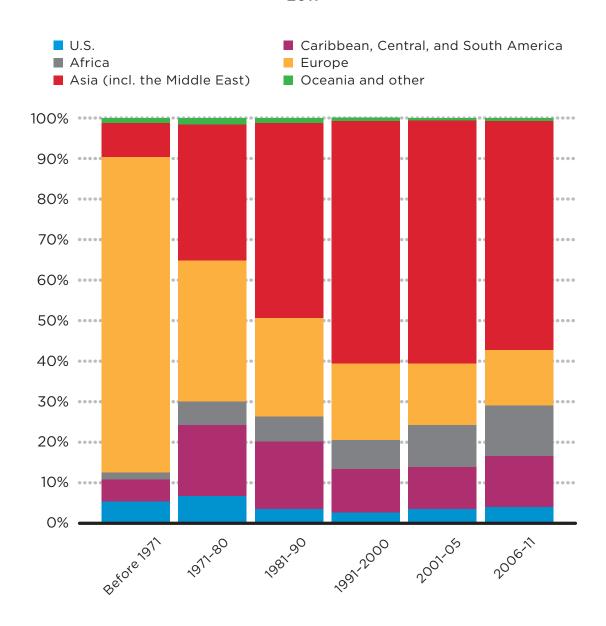
Less than 10 percent of immigrants who arrived in Canada prior to 1971 were from Asian countries. Yet nearly 60 percent of immigrants who arrived during the two decades from 1991 to 2011 came from Asia. The Philippines, China, and India have been the major source countries within Asia.

The increase in immigration from Africa to Canada has also been notable but is not nearly as substantial as immigration from Asia. Meanwhile, over the past five decades, immigration to Canada from the U.S. has accounted for 5 percent or less of total immigration to Canada.216

<sup>216</sup> Canada, Statistics Canada, Immigration and Ethnocultural Diversity in Canada, 15 Sept. 2016. http://www12.statcan.gc.ca/nhs-enm/2011/assa/99-010-x/99-010-x2011001-eng.cfm.



### Canada: Immigrants by Region of Origin and Period of Entry, 2011



Source: Canada, Statistics Canada, Immigration and Ethnocultural Diversity in Canada, 15 Sept. 2016.

## Nearly 300,000 permanent residents are admitted each year...

Significant Fact:
Canada
admitted more
than 270,000
permanent
residents in
2015.

The number of permanent residents admitted to Canada fluctuates each year. In 2015, some 271,847 immigrants were admitted as permanent residents. The first chart on the next page shows the total number of permanent resident admissions by year going back to 1980. It is evident from the chart that permanent resident admissions increased substantially in the late 1980s. With the exception of a few years in the late 1990s, annual permanent resident admissions have been over 200,000 every year since 1990.<sup>217</sup>

Permanent residents come to Canada from around the world. In 2015, the largest share, 18.7 percent, came from the Philippines, followed by 14.5 percent from India and 7.2 percent from China. The three Middle Eastern countries of Iran, Pakistan, and Syria collectively accounted for just over 10 percent of permanent residents admitted to Canada in 2015. Meanwhile, some 2.8 percent of newly admitted permanent residents came from the U.S.<sup>218</sup>

<sup>217</sup> Canada, IRCC, Facts & Figures 2015: Immigration Overview - Permanent Residents - Annual IRCC Updates, http://open.canada.ca/data/en/dataset/2fbb56bd-eae7-4582-af7d-a197d185fc93.

<sup>218</sup> Ibio

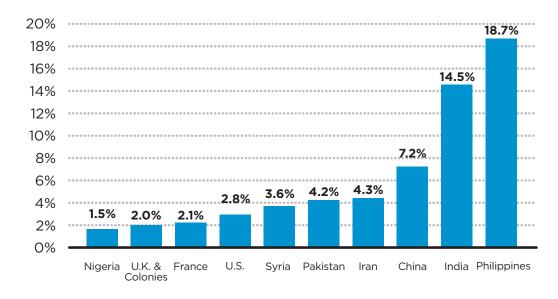


#### Canada: Permanent Residents Admitted Annually, 1980-2015



Source: Canada, IRCC, Facts & Figures 2015: Immigration Overview - Permanent Residents - Annual IRCC Updates.

#### Canada: Permanent Residents Admitted, by Country of Origin, 2015



Source: Canada, IRCC, Facts & Figures 2015: Immigration Overview - Permanent Residents - Annual IRCC Updates.

## ... Permanent residents are admitted through three main preference categories...

Significant Fact:
In Canada, the
greatest share
of permanent
resident slots
go to economic
class migrants.

Canada's immigration system facilitates permanent resident admissions through three main preference categories: family reunification, economic, and refugee resettlement.

In Canada, unlike in the U.S., economic class immigrants represent the largest share of permanent resident admissions. In 2015, principal applicants in the economic class comprised just over 28 percent of total permanent resident admissions. The spouses and dependent children of those principal applicants accounted for an additional 34.5 percent of newly admitted permanent residents.<sup>219</sup>

In 2015 about one-quarter of new permanent residents were admitted to Canada through the family class preference. To be admitted through this preference class, an individual must be sponsored by a family member or close relative in Canada. <sup>220</sup> Compared to the U.S. immigration system, Canada's gives considerably less weight to family reunification. Recall that approximately 65 percent of permanent resident admissions to the U.S. are through one of the family preference categories. <sup>221</sup> While both systems reserve admission slots for the noble purpose of reuniting families, Canada's system more evenly balances this objective with other goals.

Finally, approximately 11.8 percent of new permanent residents were admitted to Canada as refugees in 2015. 222 Refugee numbers have increased in recent years, primarily driven by Canada's resettlement of Syrian refugees. Indeed, from late 2015

<sup>219</sup> Canada, IRCC, Facts & Figures 2015: Immigration Overview - Permanent Residents - Annual IRCC Updates, http://open.canada.ca/data/en/dataset/2fbb56bd-eae7-4582-af7d-a197d185fc93.

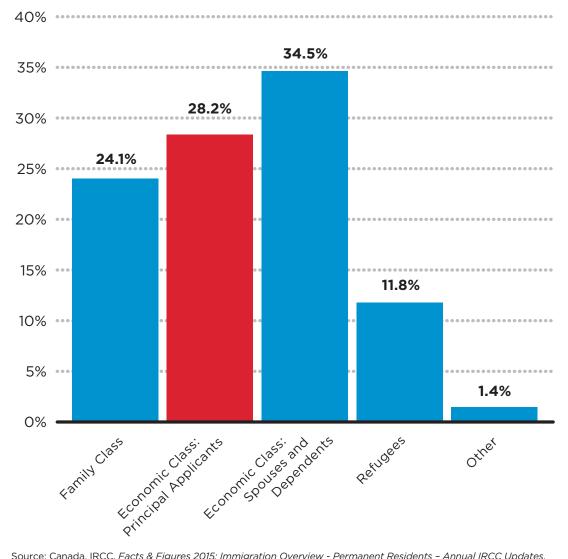
<sup>220</sup> Ibid

<sup>221</sup> International Migration Outlook 2016, OECD, 2016, OECD iLibrary, http://www.keepeek.com/Digital-Asset-Management/oecd/social-issues-migration-health/international-migration-outlook-2016\_migr\_outlook-2016-en#.WQzaK9LyuUk#page54.

<sup>222</sup> Ibid

through January 2017, more than 40,000 Syrian refugees were resettled in Canada.223

#### Canada: Permanent Residents by Admission Class, 2015



Source: Canada, IRCC, Facts & Figures 2015: Immigration Overview - Permanent Residents - Annual IRCC Updates.

<sup>223</sup> Government of Canada, Immigration, Refugees and Citizenship Canada, Communications Branch, "#WelcomeRefugees: Key Figures," 09 Feb. 2017. http://www.cic.gc.ca/english/refugees/welcome/ milestones.asp.

## ... And special emphasis is placed on economic needs.

Significant Fact:
Canada utilizes
a merit pointbased system to
prioritize skilled
workers through
its economic
preference
category.

Several sub-categories exist within the economic class priority category for permanent residents. They are broken out in the chart on the next page.

Skilled workers represented the largest share (39.6 percent) of principal applicant admissions in 2015.<sup>224</sup> These slots are allocated using a merit-based point system. Prospective immigrants are assessed on their ability to contribute to Canada's economy by considering a number of factors, including an applicant's age, language proficiency, educational attainment, and work experience. Points are awarded based on the extent to which a prospective immigrant displays favorable characteristics, and these points help decide to whom permanent resident slots are awarded.

The Provincial Nominee Program admits the second highest share (27.3 percent) of principal applicant economic class migrants. This program allows Canadian provinces to nominate prospective immigrants to come and settle there as permanent residents. The flexibility this program provides to Canada's immigration system is noteworthy. Whereas it is difficult for the federal government to know the specific needs of various regions, this program allows provinces to target certain groups or skill groups that they believe will benefit their regions. While the admitted immigrants are not required to remain in the province to which they are admitted, data show that more than 78 percent of those admitted in 2006 were still in the same province three years later.

A version of Canada's Provincial Nominee Program has been proposed in the U.S. in the form of so-called "state-based visas." It remains to be seen whether such proposals gain any traction. But in any case, certainly there are many lessons that can be learned from Canada's merit-based immigration system.

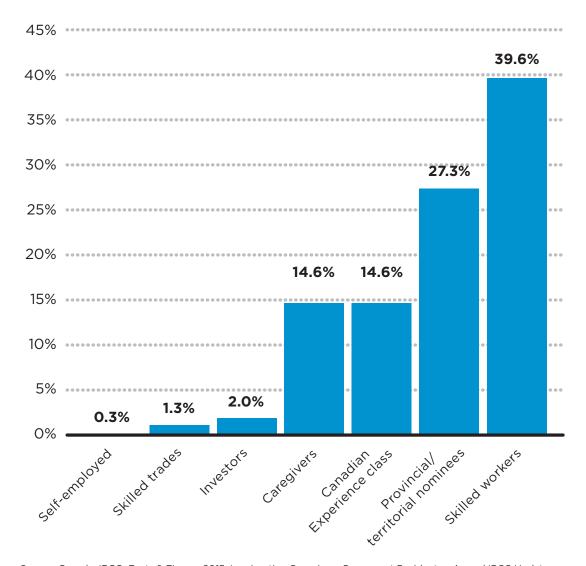
225 Ibid.

<sup>224</sup> Canada, IRCC, Facts & Figures 2015: Immigration Overview - Permanent Residents - Annual IRCC Updates, http://open.canada.ca/data/en/dataset/2fbb56bd-eae7-4582-af7d-a197d185fc93.

<sup>226</sup> Brandon Fuller and Sean Rust, State-Based Visas: A Federalist Approach to Reforming U.S. Immigration Policy (Washington: Cato Institute, 2014).



## Canada: Permanent Residents Admitted as Principal Applicants, by Economic Class Sub-Category, 2015



Source: Canada, IRCC, Facts & Figures 2015: Immigration Overview - Permanent Residents - Annual IRCC Updates.

### Two temporary resident programs facilitate short-term worker access.

#### Significant Fact:

Canada's two temporary resident programs provide access to low- and high-skilled temporary workers.

Canada has two programs that facilitate temporary migration: the Temporary Foreign Worker Program (TFWP) and the International Mobility Program (IMP).

Workers coming through the TFWP can enter Canada at the request of employers to fulfill temporary labor shortages. However, these migrants must pass a "Labor Market Impact Assessment," which certifies they are not displacing native Canadians from the labor market. As is evident in the first chart on the next page, the TFWP places a larger emphasis on lowerskilled temporary workers. Indeed, in 2016 nearly three-quarters of TFWP permit holders were employed in positions classified as lower-skilled.<sup>227</sup>

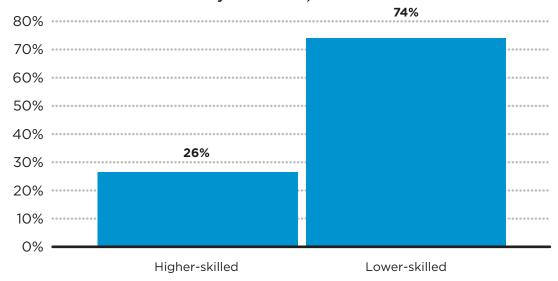
The IMP allows entry of foreigners with work permits "whose primary objective is to advance Canada's broad economic and cultural national interests." Temporary workers admitted through the IMP are not required to complete a labor market impact assessment. The IMP program is rather strategic and aims "to provide competitive advantages to Canada and reciprocal benefits to Canadians or permanent residents."228

The second chart on the next page displays the breakdown of IMP permit holders who entered Canada in 2016 by skill level. Unlike the TFWP workers, IMP permit holders are much more likely to be high-skilled, with more than 90 percent working in such occupations.<sup>229</sup>

- 227 Author's calculations. Data from Canada, IRCC, Facts & Figures 2015: Immigration Overview - Temporary Residents - Annual IRCC Updates, http://open.canada.ca/data/en/dataset/052642bb-3fd9-4828-b608-
- 228 Government of Canada, Immigration, Refugees and Citizenship Canada, Communications Branch, "Changes to the International Mobility Program with Respect to Foreign Governments and International Organizations," 31 Mar. 2017, http://www.cic.gc.ca/english/department/acts-regulations/ forward-regulatory-plan/imp.asp.
- 229 Author's calculations. Data from Canada, IRCC, Facts & Figures 2015: Immigration Overview - Temporary Residents - Annual IRCC Updates, http://open.canada.ca/data/en/dataset/052642bb-3fd9-4828-b608c81dff7e539c.

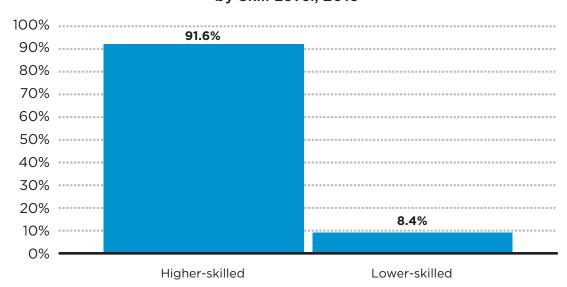


#### Canada: Temporary Foreign Worker Program Work Permit Holders, by Skill Level, 2016



Source: Canada, IRCC, Facts & Figures 2015: Immigration Overview - Permanent Residents - Annual IRCC Updates.

#### Canada: International Mobility Program Work Permit Holders, by Skill Level, 2016



Source: Canada, IRCC, Facts & Figures 2015: Immigration Overview - Permanent Residents - Annual IRCC Updates.

\*Note: Percentages represent International Mobility Program Work Permit Holders for whom skill level is identified.

### **Immigrants to Canada** are highly educated ...

Significant Fact:

Nearly 40 percent of immigrants to Canada possess a bachelor's degree or greater.

Immigrants in Canada greatly outperform with respect to educational achievement. Nearly 40 percent of both male and female immigrants 25–54 years old possessed a bachelor's degree in 2011. For males, that is nearly twice the rate of native-born Canadians, and female immigrants significantly outperform their native-born peers as well.<sup>230</sup>

Furthermore, and similar to the situation in the U.S., immigrants in Canada tend to specialize to a disproportionate extent in science, technology, engineering, and math (STEM) disciplines. In 2011, immigrants held approximately 50.9 percent of all STEM degrees in Canada. The percentage was even higher for engineering, where nearly 60 percent of degrees were held by the foreign-born, and mathematics/computer science, where nearly 56 percent of degrees were held by immigrants.<sup>231</sup>

Unlike many immigrants to the U.S., immigrants to Canada have strong language skills. The reason, of course, is that Canadian immigration screens for language skills as part of its point-based system. The bottom graph on the next page shows the effectiveness with which Canada has been able to attract immigrants with language proficiency. Virtually all principal applicants to the economic preference category were proficient in English, French, or both in 2015.<sup>232</sup>

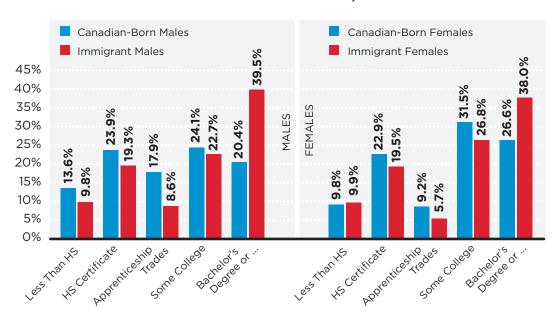
<sup>230</sup> Canada, Statistics Canada, Women in Canada: A Gender-based Statistical Report, by Tamara Hudon. 21 Oct. 2015. http://www.statcan.gc.ca/pub/89-503-x/2015001/article/14217-eng.pdf.

<sup>231</sup> Canada, Statistics Canada, Education in Canada: Attainment, Field of Study and Location of Study, 15 Sept. 2016, http://www12.statcan.gc.ca/nhsenm/2011/as-sa/99-012-x/99-012-x2011001-eng.cfm.

<sup>232</sup> Canada, Immigration, Refugees and Citizenship, 2016 Annual Report to Parliament on Immigration, 31 Oct. 2016, http://www.cic.gc.ca/english/ resources/publications/annual-report-2016/index.asp.

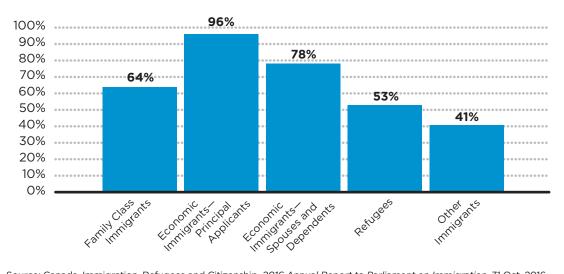


## Educational Attainment, Canadian-Born and Immigrants, Males and Females 25–54 Years Old, 2011



Source: Canada, Statistics Canada, Women in Canada: A Gender-based Statistical Report, By Tamara Hudon. 21 Oct. 2015.

## Percentage of Immigrants Who Are Proficient in English, French, or Both, Permanent Resident Immigrants by Admission Category, 2015



Source: Canada, Immigration, Refugees and Citizenship, 2016 Annual Report to Parliament on Immigration, 31 Oct. 2016.

## ... Yet their labor force participation and employment rates lag ...

Significant Fact: **Immigrants lag** behind native**born Canadians** in terms of employment. However, immigrants who have been in Canada longer are more likely than recent immigrants to be employed.

Despite Canada's emphasis on skill- and work-based immigration, the proportion of immigrants in the labor force and employed lags that of native-born Canadians.

Indeed, as the charts on the next page show, in 2016 some 88.1 percent of native Canadians of core working age — defined as between the ages of 25 and 54 — were in the labor force and 83.2 percent were employed. Yet the same was true of only 83.4 percent and 77.6 percent of immigrants, respectively. Immigrants were also more likely than native-born Canadians to be unemployed.<sup>233</sup>

These data points are a departure from the experience in the U.S., where immigrants are more likely than native-born Americans to be in the labor force and employed and less likely to be unemployed.<sup>234</sup>

One thing to note about the experience of immigrants in Canada's labor market is that the data described above improve the longer an immigrant has lived in Canada. For instance, only 68.2 percent of recent immigrants — those who have lived in Canada for fewer than five years — were employed in 2016. Yet among immigrants who had been in Canada between five and 10 years in 2016, 76.1 percent were employed, as were 80.7 percent of immigrants who had been in Canada for more than 10 years.<sup>235</sup> This suggests that although immigrants may experience some difficulty breaking into the Canadian labor market, given time they find employment and contribute to Canada's economy.

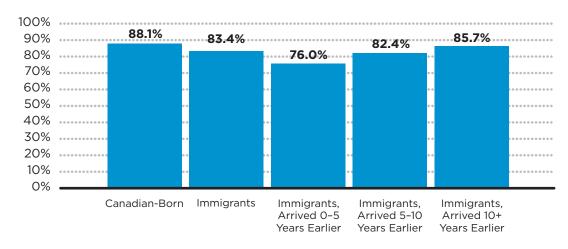
<sup>233</sup> Canada, Statistics Canada, Table 282-0104 - Labour force survey estimates (LFS), by immigrant status, sex and detailed age group, Canada, annual, CANSIM, 06 Jan. 2017.

<sup>234</sup> U.S. Census Bureau, 2015 American Community Survey.

<sup>235</sup> Canada, Statistics Canada, Table 282-0104 - Labour force survey estimates (LFS), by immigrant status, sex and detailed age group, Canada, annual, CANSIM, 06 Jan. 2017.

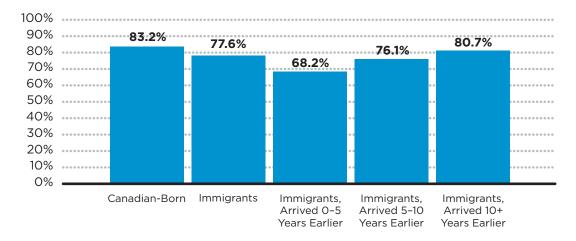


#### Labor Force Participation Rate, Canadian-Born and Immigrants, 25–54 Years Old, 2016



Source: Canada, Statistics Canada, Table 282-0104 - Labour force survey estimates (LFS), by immigrant status, sex and detailed age group, Canada, annual, CANSIM, 06 Jan. 2017.

## Employment Rate, Canadian-Born and Immigrants, 25-54 Years Old, 2016



Source: Canada, Statistics Canada, Table 282-0104 - Labour force survey estimates (LFS), by immigrant status, sex and detailed age group, Canada, annual, CANSIM, 06 Jan. 2017.

#### ... As do their incomes, especially in the early years after arrival in Canada.

Median incomes
for recent
immigrants
lag behind
other Canadian

**Significant Fact:** 

as immigrants gain more

experience.

tend to increase

workers, but

As the first chart on the next page shows, the median employment income for recent immigrants in 2014 was \$24,000.<sup>236</sup> This is significantly below the median total income for all Canadian workers.<sup>237</sup>

However, it is evident from the chart that some classes of immigrants have quite high earnings. Median incomes among immigrants were highest, at \$50,000 in 2014, for those who were principal applicants to the Canadian Experience preference category. That category gives preference to foreigners who have previous experience in Canada, whether that be as a student, foreign worker, refugee, or temporary resident. It seems likely that having previous familiarity with Canada, its labor force, and cultural norms is advantageous to a new immigrant trying to break into the job market.

Median incomes are also well above the average for immigrants who came as principal applicants to the provincial/territorial preference class or to the skilled worker class. Of course, these preference classes screen using a merit point—based system. So these immigrants are likely higher skilled than others and thus command higher earnings in the labor market.

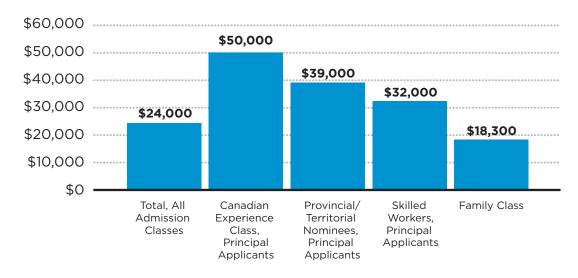
The second chart on the next page displays median earnings of recent immigrations to Canada. What is evident is that incomes tend to increase significantly after a few years. Although immigrant incomes often start at a low base, it is encouraging to know that they rise as immigrants gain more experience working in Canada.

<sup>236</sup> Canada, Statistics Canada, *The Daily*, "Income and Mobility of Immigrants, 2014," 12 Dec. 2016, http://www.statcan.gc.ca/daily-quotidien/161212/dq161212b-eng.pdf.

<sup>237</sup> Canada, Statistics Canada, *Table 111-0008 - Neighbourhood income and demographics, taxfilers and dependents with income by total income, sex and age group, annual (number unless otherwise noted)*, CANSIM, 12 Dec. 2016.



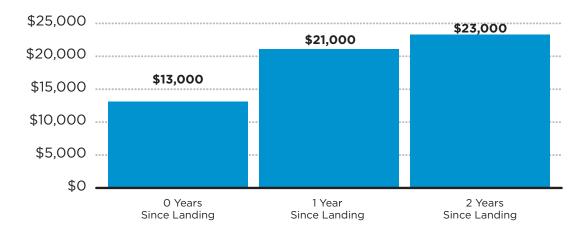
#### Median Employment Income, Selected Admission Classes, Tax Year 2014



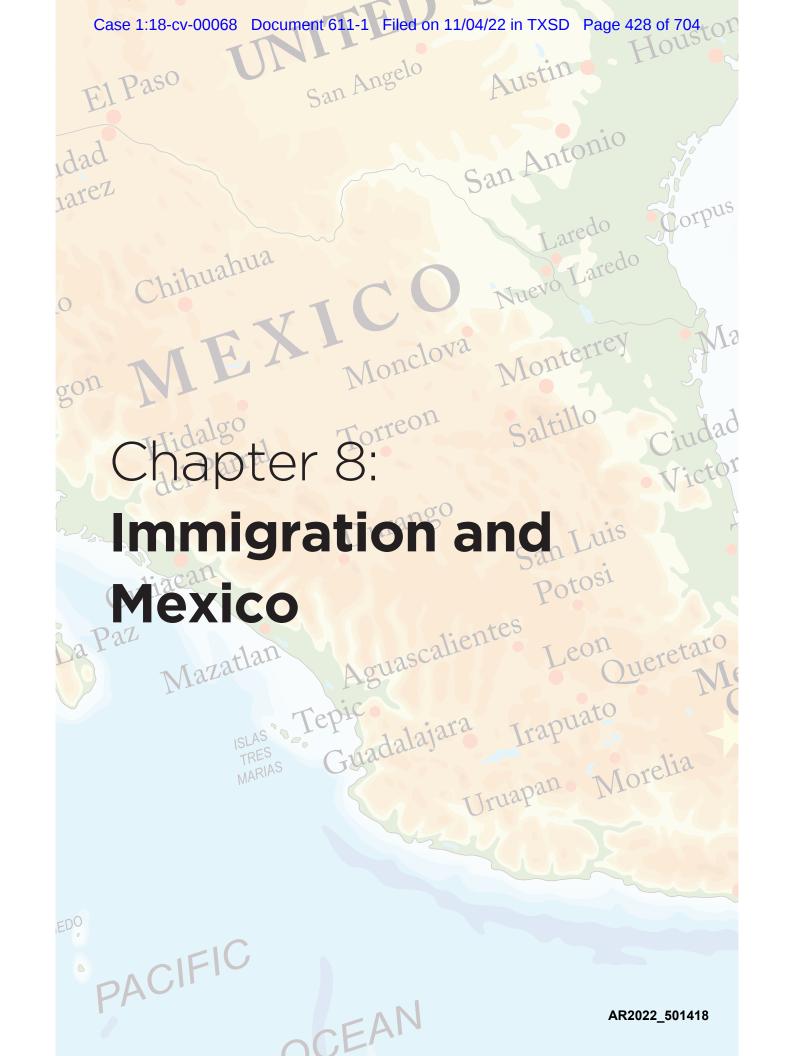
Source: Canada, Statistics Canada, *The Daily*, "Income and Mobility of Immigrants, 2014," 12 Dec. 2016.

Note: Data are for immigrants who landed in Canada during the period 2009-14.

#### Median Immigrant Employment Income, by Years Elapsed since Landing in Canada, 2012



Source: Canada, Statistics Canada. *Table 054-0001 - Income of immigrants, by sex, landing age group, immigrant admission category, years since landing and landing year, 2014 constant dollars, annual, CANSIM, 12 Dec. 2016.* 





#### **Immigration and Mexico**

Mexico's experience with immigration is markedly different than that of the U.S. and Canada. While the U.S. and Canada are immigrant-intensive countries, Mexico is an emigrant, immigrant, and transit country. Traditional immigrants account for less than 1 percent of Mexico's population. Yet, the immigration issue intertwines the U.S. and Mexico and is a defining aspect of the U.S.-Mexico relationship.

This chapter addresses three main migrant groups in Mexico: foreign-born individuals residing in Mexico, temporary "border crossers," and transit migrants.

The first group totals about 1 million people, and a large share of them were born in the U.S. Many in this group have Mexican ancestry, meaning one or both of their parents are Mexican.

Temporary "border crossers" are the second migrant group discussed in this chapter. Nearly half a million such migrants enter Mexico each year across its southern border with Guatemala and Belize. Nearly all of these migrants are authorized; the vast majority fill temporary jobs and then return to their home countries.

The third group is transit migrants. These migrants are unauthorized, entering Mexico en route to the U.S. In 2015, there were an estimated 390,000 unauthorized transit migrants, nearly all of them from Central America.

This chapter will elaborate on each of these three groups of migrants, providing data to illuminate the role the foreign-born play in Mexico. Special attention is given to how migration issues in Mexico affect the U.S., and vice versa. Greater cooperation between the U.S. and Mexico on immigration issues is warranted, and if structured correctly, could benefit both countries.

<sup>\*</sup>The author acknowledges and thanks Cedrian Lopez-Bosch for his guidance in the research and writing of this chapter.

## Mexico is home to approximately one million immigrants.

Significant Fact: **Immigrants** represent less than 1 percent of Mexico's total population, yet immigration remains an important policy issue in Mexico.

In 2015, Mexico's population totaled just over 127 million. Of those, just over 1 million (1,007,063) were foreign-born.<sup>238</sup> Of these 1 million foreign-born, some 63.6 percent were born abroad to one or more parents of Mexican ancestry. Thus, many of these "foreign-born" hold Mexican citizenship in addition to citizenship in the country where they were born, and nearly half possess a Mexican birth certificate or are registered in Mexico's civil registry.

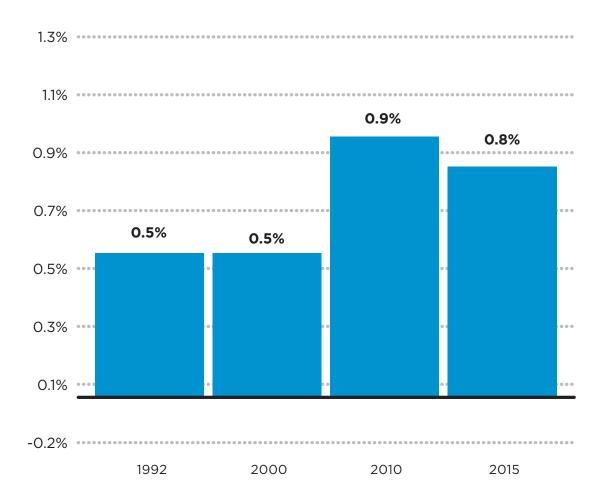
Mexico's foreign-born population is larger today, in total numbers and as a share of the population, than it was in earlier years. As recently as 2000, just over a half a million immigrants lived in Mexico, representing a mere 0.5 percent of the population as a whole. The immigrant population nearly doubled between 2000 and 2015, growing at a significantly faster rate than the rest of the population. Thus by 2015 the share of the population that was foreign-born had increased to 0.8 percent.239

This increase has, of course, come from a low level. And immigrants still represent less than 1 percent of Mexico's population. Even so, immigration is an important policy issue for Mexico, and has significant ramifications for the United States.

<sup>238</sup> Mexico, Secretariat of Government, Migration Policy Bureau, National Population Council, The Compendium on International Mobility and Migration: Dimensions of the Phenomenon in Mexico, 1st ed., 2016.



#### Mexico: Foreign-Born Share of Total Population, 1990-2015



Source: The Compendium on International Mobility and Migration.

## Nearly three-quarters of immigrants in Mexico were born in the U.S.

#### **Significant Fact:**

Nearly three
of every four
immigrants
in Mexico
were born in
the U.S., and
many of these
immigrants
have Mexican
ancestry.

The vast majority, 73.4 percent, of immigrants in Mexico in 2015 were born in the U.S. The other top countries of origin include Guatemala (4.3 percent of total immigrants), Spain (2.2 percent), Colombia (1.9 percent), Venezuela (1.6 percent), and Argentina (1.5 percent). Among immigrants in Mexico who were born in the U.S., nearly half reside in Mexico's northern border states.

Of particular note: More than eight in 10 U.S.-born immigrants living in Mexico have at least one parent with Mexican nationality. Furthermore, the majority of U.S.-born immigrants to Mexico, some 67.8 percent, are children. The median age of U.S.-born immigrants in Mexico is 11, and more than three-quarters of such immigrants are under 20 years old. This means that Mexico's largest immigrant group is composed primarily of the children of Mexican nationals who were born in the U.S. and later migrated to Mexico.

Family reunification drives much of the migration to Mexico by U.S.-born migrants. In 2014, nearly 80 percent of U.S.-born migrants who had moved to Mexico during the past five years reported reuniting with family as the cause for their migration. Deportations likely account for some of these migration figures. It is not difficult to imagine that if unauthorized immigrant parents in the U.S. are sent back to Mexico, their U.S.-born children would join them in moving to Mexico. However, data from the Pew Research Center suggest much of the migration to Mexico is voluntary, with only around 14 percent of return migrants to Mexico reporting deportation as the reason for their move.<sup>242</sup>

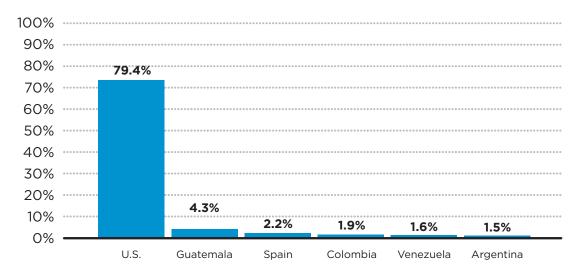
<sup>240</sup> Mexico, Secretariat of Government, Migration Policy Bureau, National Population Council, *The Compendium on International Mobility and Migration: Dimensions of the Phenomenon in Mexico*, 1st ed., 2016.

<sup>241</sup> Ibic

<sup>242</sup> Ana Gonzalez-Barrera, More Mexicans Leaving Than Coming to the U.S.: Net Loss of 140,000 from 2009 to 2014; Family Reunification Top Reason for Return, (Washington, D.C.: Pew Research Center, 2015), http://www. pewhispanic.org/2015/11/19/more-mexicans-leaving-than-coming-to-theu-s/

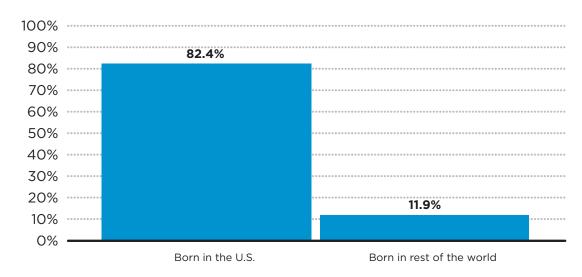
Immigrants to Mexico from countries other than the U.S. are far less likely to have Mexican ancestry, and they are more likely to be adults. Their median age is 38 years and 36 years for men and women, respectively, and more than 70 percent are either the head-of-household or the spouse of a head of household. Only 14.2 percent of these immigrants are under 20 years old.<sup>243</sup>





Source: The Compendium on International Mobility and Migration.

Share of U.S.-Born and Non-U.S.-Born Immigrants to Mexico with Mexican Ancestry, 2015



<sup>243</sup> Mexico, Secretariat of Government, Migration Policy Bureau, National Population Council, *The Compendium on International Mobility and Migration: Dimensions of the Phenomenon in Mexico*, 1st ed., 2016.

### Immigrants to Mexico have a relatively high level of education.

**Significant Fact:** 

Approximately
42 percent of
immigrants
to Mexico
are college
educated.

In 2015, approximately 485,000 immigrants in Mexico were of working age — 15 years of age or older. Of this group, the majority had attained either a college education (42 percent) or a high school education (27 percent). Junior high school was the highest level of educational achievement for 18 percent of Mexico's immigrant population, while 13 percent had achieved less than a junior high school education.<sup>244</sup>

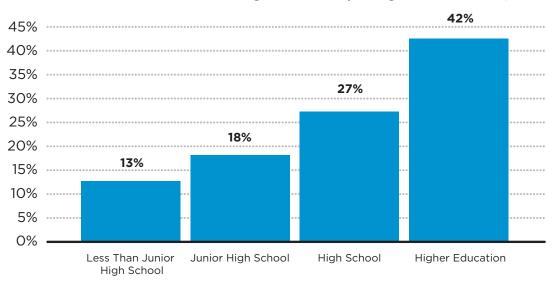
As the second chart on the next page makes clear, educational attainment diverges when comparing immigrants born in the U.S. with immigrants who were born in other countries. Immigrants born in other countries were more likely in 2015 to have attained a higher education: 54 percent compared to 30 percent of immigrants born in the U.S. Yet at the same time, these immigrants were also more likely to have a very low level of education, with 19 percent of immigrants from countries other than the U.S. possessing less than a junior high school level of education compared to only 6 percent of immigrants born in the U.S.<sup>245</sup>

Keep in mind that the majority of U.S.-born immigrants to Mexico are under the age of 15 and thus fall outside the data explained above. It is therefore useful to examine school attendance data for these younger immigrants. Some 97–98 percent of U.S.-born immigrants in Mexico between the ages of 6 and 12 attend school, and the same is true for approximately 90 percent of immigrants born in other countries. Yet, school attendance rates drop for immigrant students as they age beyond 12 years old.<sup>246</sup>

<sup>244</sup> Author's calculations. Data from Mexico, Secretariat of Government, Migration Policy Bureau, National Population Council, The Compendium on International Mobility and Migration: Dimensions of the Phenomenon in Mexico, 1st ed., 2016.

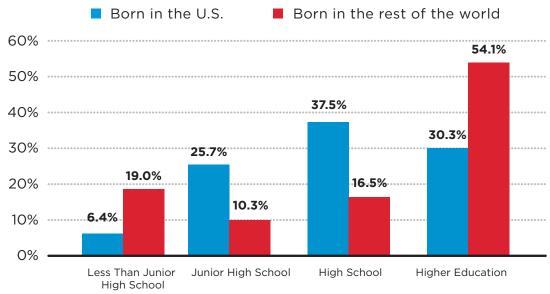
Mexico, Secretariat of Government, Migration Policy Bureau, National Population Council, *The Compendium on International Mobility and Migration: Dimensions of the Phenomenon in Mexico*, 1st ed., 2016.
 Ibid.

Mexico: Education Level of Foreign-Born People Age 15 and Older, 2015



Source: The Compendium on International Mobility and Migration.

Mexico: Education Level of Foreign-Born People Age 15 and Older, by Region of Birth, 2015



# The employment rate of immigrants lags that of the general population.

Significant Fact:
Immigrants
in Mexico are
employed at
a lower rate
than Mexico's
population as a
whole, largely
as a result of
the significant
share of young
U.S.-born
immigrants who
are students.

Immigrants in Mexico are employed at a lower rate than the country's population as a whole. In 2015, approximately 60.7 percent of Mexico's population, aged 15 years and older, were employed. Meanwhile, the same was true of only 48.7 percent of immigrants. Meanwhile,

As the first chart on the next page shows, immigrants in Mexico who were born in countries other than the U.S. have a very similar employment rate (59.1 percent) to that of Mexico's population as a whole. It is the U.S.-born immigrants in Mexico, with an employment rate of only 38.2 percent, who pull down the overall foreignborn employment rate.

This lower employment rate for U.S.-born immigrants is explained by two main factors. First, U.S.-born immigrants are less likely to report work-related reasons for migrating to Mexico, instead tending to migrate for the primary purpose of reuniting with family. The other major reason relates to the young age of U.S.-born immigrants. A significant share, some 27.6 percent, are students and therefore not yet employed in the labor force.<sup>249</sup>

Unemployment among immigrants in Mexico is fairly low. In 2015, the unemployment rate for all foreign-born men and women was 5.8 percent and 4.5 percent, respectively.<sup>250</sup>

The second chart on the next page shows the main sectors in which employed immigrants work. A majority of immigrants, 56.2 percent, work in service sector jobs. Beyond the service sector, another 18.0

<sup>247 &</sup>quot;Employment Rate (indicator)," *OECD Data*, Organisation for Economic Co-operation and Development, 2017, http://www.oecd-ilibrary.org/employment/employment-rate/indicator/english\_1de68a9b-en.

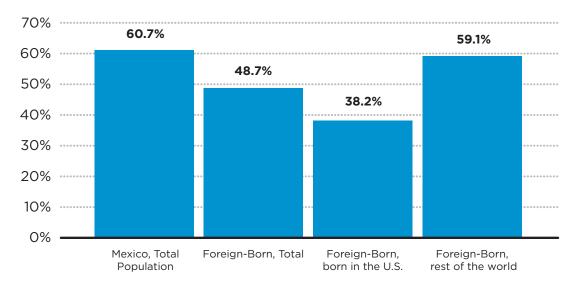
<sup>248</sup> Mexico, Secretariat of Government, Migration Policy Bureau, National Population Council, *The Compendium on International Mobility and Migration: Dimensions of the Phenomenon in Mexico*, 1st ed., 2016.

<sup>249</sup> Ibid.

<sup>250 &</sup>quot;Mexico," Organisation for Economic Co-operation and Development, 2017, International Migration Outlook 2017, 29 June 2017, http://dx.doi. org/10.1787/migr\_outlook-2017-29-en.

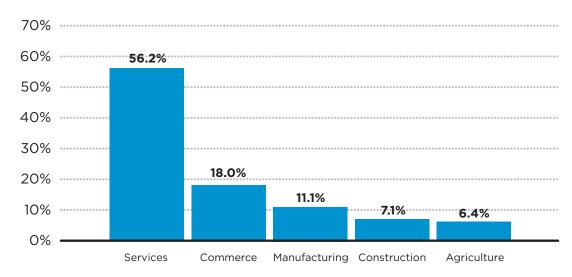
percent work in commerce, 11.1 percent work in manufacturing, 7.1 percent work in construction, and 6.4 percent are employed in agriculture.<sup>251</sup>

Mexico: Percentage of All People Age 15 and Older Who Are Employed, 2015



Source: The Compendium on International Mobility and Migration. OECD, 2017.

### Percentage of Foreign-Born People Age 15 and Older Who Work in Each Sector, 2015



Source: Author's calculations. Data from *The Compendium on International Mobility and Migration*.

<sup>251</sup> Mexico, Secretariat of Government, Migration Policy Bureau, National Population Council, *The Compendium on International Mobility and Migration: Dimensions of the Phenomenon in Mexico*, 1st ed., 2016.

## Thousands of permanent and temporary resident permits are granted each year.

**Significant Fact:** In 2016 Mexico issued 35,906 new permanent resident visas and 52,244 temporary resident visas.

Mexico's immigration system provides the possibility for foreign-born people to immigrate permanently or to reside in Mexico on a temporary basis. In 2016, some 88,150 permanent and temporary resident permits were granted by the Mexican government. Of these, 35,906 were permanent resident visas and 52,244 were temporary resident visas.

Annual immigration to Mexico is considerably higher in recent years than in the past. In 2001, only 20,600 combined permanent and temporary resident visas were granted. This number grew to 50,500 in 2005 and to nearly 65,000 by 2010.<sup>252</sup> However, as is evident from the charts on the next page, immigration has increased especially since 2012. That year legislative changes made it easier for temporary residents to obtain a permanent resident visa.<sup>253</sup>

Permanent and temporary immigrants to Mexico hail from countries around the world. The U.S. continues to be the top source country for immigrants each year, accounting for 18.8 percent and 12.7 percent of permanent and temporary resident visas, respectively, in 2016. Besides the U.S., other countries whose citizens receive a large share of total permanent resident visas include Honduras (7.1 percent), Venezuela (7.1 percent), Cuba (6.7 percent), Colombia (6.1 percent), and China (5.9 percent). And other top countries for temporary resident visas include Venezuela (9.4 percent), Colombia (8.4 percent), Cuba (8.0 percent), Spain (6.1 percent), and China (4.5 percent).<sup>254</sup>

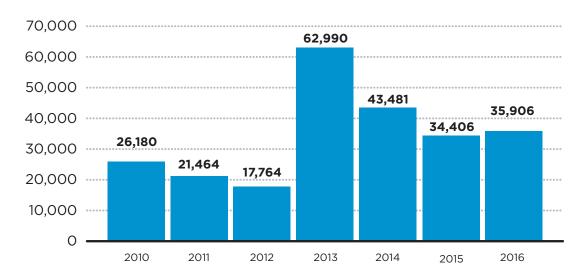
<sup>252</sup> Mexico, Secretariat of Government, Migration Policy Bureau, National Population Council, The Compendium on International Mobility and Migration: Dimensions of the Phenomenon in Mexico, 1st ed., 2016.

<sup>253 &</sup>quot;Mexico," Organisation for Economic Co-operation and Development, 2017, International Migration Outlook 2017, 29 June 2017, http://dx.doi. org/10.1787/migr\_outlook-2017-29-en.

<sup>254</sup> Migration Policy Bureau, Historical series Document expedition for Nonimmigrants (FM3) and Immigrants (FM2), 2001-12 and Bulletin of Migratory Statistics 2013-16.

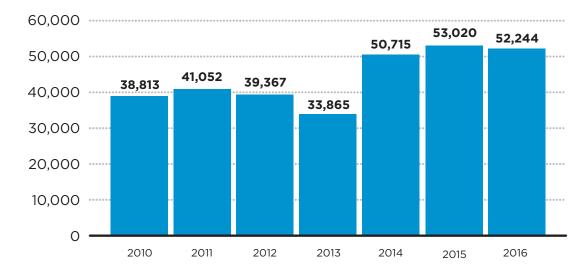


#### Mexico: Total Number of New Permanent Residents by Year, 2010-16



Source: Migration Policy Bureau, Historical series Document expedition for Nonimmigrants (FM3) and Immigrants (FM2), 2001–12 and Bulletin of Migratory Statistics 2013–16

#### Mexico: Total Number of New Temporary Residents by Year, 2010-16



Source: Migration Policy Bureau, Historical series Document expedition for Nonimmigrants (FM3) and Immigrants (FM2), 2001-12 and Bulletin of Migratory Statistics 2013-16.

### Temporary residents come to work; permanent residents come for family reasons.

**Significant Fact:** 

**Some 45** 

percent of

temporary

residents come

via work-

based visas

compared to

only 25 percent

of permanent

residents.

The charts on the next page provide a detailed breakdown of the admission categories of immigrants granted permanent and temporary resident visas in 2015. Nearly half of permanent residents were admitted via a family-based visa, while workers represented around one-quarter of new permanent residents.<sup>255</sup>

While family reunification plays a larger role than work among permanent residents, the balance is tilted in favor of workers for temporary visas. Indeed, in 2015 some 45.3 percent of temporary visas went to workers while 28.7 percent were issued to those applying through family categories.<sup>256</sup>

The age breakdown of permanent and temporary residents is reflective of their differing propensities to be workers. That is to say, permanent residents are older compared to temporary residents. The median age of permanent residents who arrived in 2015 was 41 years old for men and 38 years old for women, compared to 33 years old and 29 years old for male and female temporary residents.<sup>257</sup>

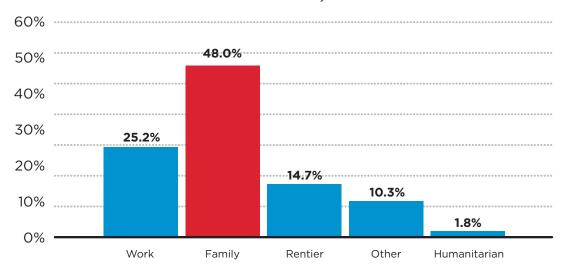
<sup>255</sup> Mexico, Secretariat of Government, Migration Policy Bureau, National Population Council, *The Compendium on International Mobility and Migration: Dimensions of the Phenomenon in Mexico*, 1st ed., 2016.

<sup>256</sup> Ibid.

<sup>257</sup> Ibid.

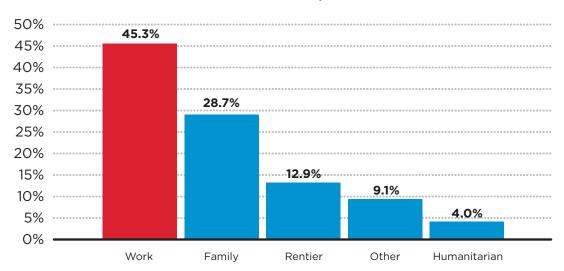


Mexico: Admission Categories of Foreign-Born Granted Permanent Resident Status, 2015



Source: The Compendium on International Mobility and Migration.

Mexico: Admission Categories of Foreign-Born Granted Temporary Resident Status, 2015



## Around half a million southern border crossers work in Mexico each year.

**Significant Fact:** 

Each year
approximately
half a million
border crossers
enter Mexico
legally to work
on a temporary
basis.

Mexico's immigration system provides legal pathways for residents of its two southern-border neighbors — Guatemala and Belize — to come to Mexico on a temporary basis. Two main visitor card programs facilitate this migration. The first is the Tarjeta de Visitante Regional (TVR), which allows individuals who are residents in these two neighboring countries to enter and exit Mexico as many times as they wish to visit the Mexican states of Chiapas, Campeche, Quintana Roo, and Tabasco. These migrants can stay in Mexico up to three days at a time, but they are not permitted to engage in any remunerated activity during their visits. The second program is the Tarjeta de Visitante Trabajador Fronterizo (TVTF), which allows nationals from the two neighboring countries to work up to one year (renewable) in the states mentioned.

Crossings of Mexico's southern border are very common. As the chart on the next page shows, half a million or more crossings take place each year. This level of migration dwarfs annual immigration counts of those coming on traditional permanent and temporary resident cards.

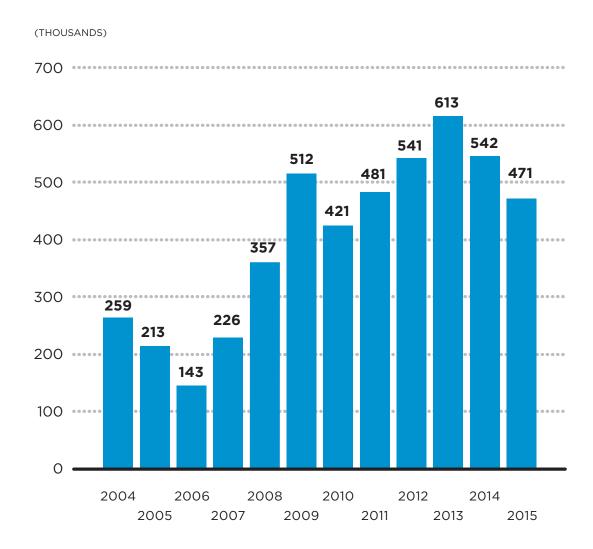
In 2015, there were 470,900 southern border crossings by workers. Some 92 percent of these migrants are men and nearly three-quarters of them are of prime working age — 20 to 45 years old. Most are low skilled; only 6.5 percent of this group have attained more than a junior high school education. Agriculture is by far the top industry, accounting for 76 percent of these migrants. Another 6.5 percent of these border crossers work in construction. <sup>258</sup>

Like Mexico, large numbers of migrants enter the U.S. by crossing its southern border. Many of these migrants come to the U.S. to fill jobs where labor

<sup>258</sup> Mexico, Secretariat of Government, Migration Policy Bureau, National Population Council, *The Compendium on International Mobility and Migration: Dimensions of the Phenomenon in Mexico*, 1st ed., 2016.

shortages exist. However, the U.S. lacks a workable low-skilled temporary guest worker program. The result has been widespread unauthorized immigration. Perhaps Mexico's system of granting temporary access to residents of neighboring countries is one model that warrants the attention of U.S. policymakers.

Flow of Cross-Border Migrants from Guatemala to Mexico, 2004-15



# Hundreds of thousands of transit migrants attempt to cross Mexico en route to the U.S. each year ...

Significant Fact:
Nearly 400,000
irregular transit
migrants passed
through Mexico
in 2014.

Due largely to its geographic position connecting the developing countries of Central America to the U.S., Mexico is the country through which hundreds of thousands of unauthorized migrants pass. Authorities estimate that in 2014 some 389,600 undocumented transit migrants passed through Mexico en route to the U.S. Around 90 percent were Central Americans, made up primarily of Hondurans, Guatemalans, and Salvadorans.<sup>259</sup>

The chart on the next page shows a marked increase in the number of unauthorized transit migrants beginning around 2012. This increase coincides with a period of intense violence in Central America, which is mostly related to drug trafficking and gang activity. Homicide rates are among the highest in the world in countries such as Honduras, El Salvador, Belize, and Guatemala, leading many residents of these Central American countries to flee north.<sup>260</sup>

The use of human smugglers, or what are referred to as "polleros" or "coyotes," complicates the problem. More than 60 percent of transit migrants who reached the U.S. and were subsequently detained and deported in 2015 used a smuggler. Yet the same is true of only 4.7 percent of those detained and deported in Mexico.<sup>261</sup> The data suggest that the smugglers are rather effective in helping transit migrants avoid detection in Mexico and reach the U.S.

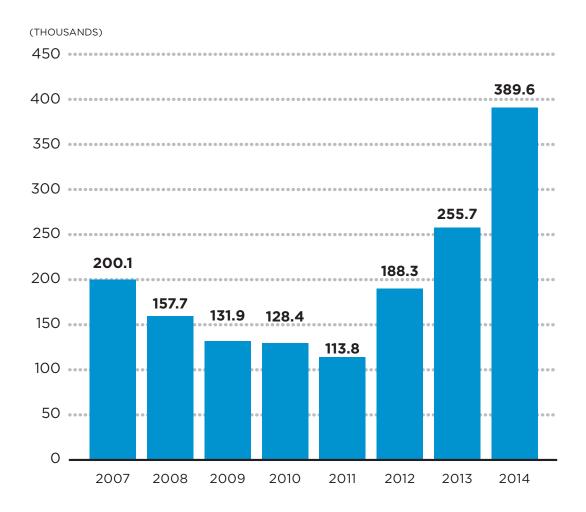
<sup>259</sup> Mexico, Secretariat of Government, Migration Policy Bureau, National Population Council, *The Compendium on International Mobility and Migration: Dimensions of the Phenomenon in Mexico*, 1st ed., 2016.

<sup>260</sup> *Global Study on Homicide, 2013*, United Nations O<sup>3</sup>ce on Drugs and Crime, 2014, https://www.unodc.org/documents/gsh/pdfs/2014\_GLOBAL\_HOMICIDE\_BOOK\_web.pdf.

<sup>261</sup> Mexico, Secretariat of Government, Migration Policy Bureau, National Population Council, The Compendium on International Mobility and Migration: Dimensions of the Phenomenon in Mexico, 1st ed., 2016.



#### Total Annual Number of Irregular Transit Migrants through Mexico, 2007-14



## ... Many transit migrants are deported, but the majority are successful in reaching the U.S.

**Significant Fact:** In 2015 nearly 130,000 unauthorized transit migrants were deported by Mexican and U.S. authorities.

Many transit migrants are detained and deported back to their home countries by either Mexican or U.S. officials. In 2015, Mexico deported over 85,000 unauthorized transit migrants and the U.S. deported around 42,200 such cases. Even so, deportations by Mexican and U.S. authorities combined are typically less than half, and sometimes closer to only around onethird, of total transit migrants in any given year.<sup>262</sup>

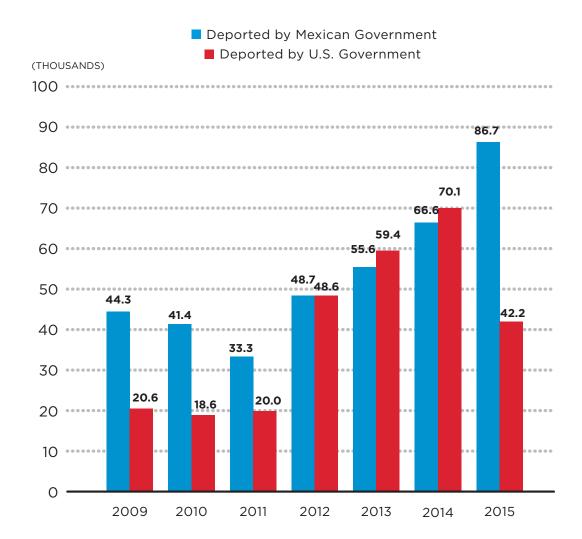
The governments of Mexico and the U.S. devote significant resources attempting to curb unauthorized immigration. The Mérida Initiative was launched in 2008 as a partnership between the two countries to combat organized crime and violence. In response, the number of deportations of unauthorized transit migrants by Mexican authorities increased in recent years.

Policymakers should explore ways to further strengthen such partnerships. After all, hundreds of thousands continue to flow through Mexico en route to the U.S., imposing costs on both countries. Helping Mexico to further improve its own border security and immigration enforcement would benefit America by reducing the number of unauthorized transit immigrants that end up crossing into the U.S.

<sup>262</sup> Mexico, Secretariat of Government, Migration Policy Bureau, National Population Council, The Compendium on International Mobility and Migration: Dimensions of the Phenomenon in Mexico, 1st ed., 2016.



#### Number of Irregular Transit Migrants Deported, 2009-15



Source: The Compendium on International Mobility and Migration.

Note: The number deported by the Mexican government includes only those irregular transit migrants who had the U.S. as their final destination. The number deported by the U.S. government includes only those irregular transit migrants who have been in the U.S. for at most one month.

## Conclusion

#### Conclusion

This book has shown the important role immigrants have in America.

Immigrants are a core part of our nation's history and will play a

critical role in its future. Nowhere is this more evident than in the realm

of economics.

Immigrants work hard and contribute to the growth of our labor force. They are leaders in innovation and entrepreneurship, developing new ideas, securing patents, and pushing boundaries in research. Immigrants start small businesses, and they have been responsible for some of the world's largest corporations, too. Without immigrants, the U.S. economy would suffer greatly.

Perhaps more than anything, immigrants show us and the world that the American dream is still attainable. Immigrants come to America optimistic about the future, but often without many material resources. Through hard work and sacrifice they move up the economic ladder and achieve success in America. This success provides the immigrants a better life, but it also helps to make America a stronger country.

But challenges do exist. Current immigration law limits the potential of what immigrants could contribute to America and its economy. Designing a detailed framework for immigration reform is well beyond the scope of this book. However, the research behind this book makes clear several necessary broader areas of reform.

First, the U.S. immigration system should be restructured to give greater preference to work-based immigration. Current law gives overwhelming preference to those with existing family connections in the U.S. While family reunification is important and should remain, there needs to be a rebalancing of priorities to be more welcoming to work-based immigrants.

Second, reform must simplify the immigration system. Laws that largely reflect the world and attitudes in 1965 — the last time the U.S. had a major immigration overhaul — have created a situation where individuals must wait sometimes more than 20 years for their immigration papers to process. These long queues put peoples' lives in legal limbo unnecessarily while harming U.S. competitiveness.

Third, new legal pathways are needed for immigrant workers — and particularly lesser-skilled immigrant workers — to enter and work in the U.S. on a temporary basis. Despite much demand from the U.S. economy for foreignborn labor, there is currently no good program to allow for such immigration. A primary consequence has been massive unauthorized immigration.

Overall, immigration laws must allow for the freer flow of people, especially workers. A new system that is more responsive to market demand is needed to ensure the vibrancy of American society and economic competiveness globally. Caps on immigration should be flexible, allowing a greater number of visas and green cards during times of strong economic growth and fewer when there is less demand for foreign workers. Ultimately the flow of immigrant workers ought to be determined within a framework that recognizes and responds to labor market needs.

In today's increasingly complex and globally competitive world, America needs the brightest, most talented, and hardest-working people the world has to offer. The objective of immigration policy, therefore, should be to affirm America as the land of opportunity — where people of any background can work hard, develop ideas, and benefit from the fruits of their labor. America's great advantage has always been its ability to attract diverse people from all corners of the globe and bring them together as one people to collectively build the American dream.

As Americans debate immigration, it is important that they understand the many ways immigrants have always contributed to our country and our economy. As our examination of Canada's immigration system has shown, an increased emphasis on immigrant skills is warranted. Canada's experience also suggests that more provincial-level control is an innovation worth considering in the U.S. We cannot debate immigration enforcement without considering the vital role that Mexico plays in helping America secure its border and the need to share in the burden caused by the thousands of transit migrants from Central America who cross Mexico attempting to reach the U.S.

With better immigration policies in place, immigrant contributions will continue to grow and drive America toward another century, or more, of prosperity.

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## Prohibiting the Employment of Unauthorized Immigrants: The Experiment Fails

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## Prohibiting the Employment of Unauthorized Immigrants: The Experiment Fails

Michael J. Wishnie<sup>†</sup>

For a century before 1986,¹ federal law permitted employers to hire undocumented immigrants.² The Immigration Reform and Control Act of 1986 ("IRCA") marked a sea change in immigration law by extending federal immigration regulation into the private workplace through the prohibition of employment of unauthorized immigrants. In the two decades since passage of this dramatic new ban, codified in the "employer sanctions" provisions of the Immigration and Nationality Act ("INA"), there has been almost no critical examination of its merits.³ Few commentators have

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<sup>&</sup>lt;sup>1</sup> Federal immigration regulation began in earnest in the 1880s and did not bar the hiring of undocumented immigrants until passage of the Immigration Reform and Control Act of 1986 ("IRCA"), Pub L No 99-603, 100 Stat 3359.

<sup>&</sup>lt;sup>2</sup> Sure-Tan, Inc v NLRB, 467 US 883, 893 (1984) (observing that it is not "a separate criminal offense for an alien to accept employment after entering this country illegally"); De Canas v Bica, 424 US 351, 360 (1976) ("at best," federal immigration statutes displayed "peripheral concern with employment of illegal entrants"). Before IRCA, twelve states prohibited the "knowing" employment of undocumented immigrants, including California, the state with the largest undocumented population. See De Canas, 424 US at 360 (rejecting preemption challenge to California statute penalizing employment of unauthorized immigrants); U.S. Immigration Policy and the National Interest: Staff Report of the Select Commission on Immigration and Refugee Policy, 97th Cong, 1st Sess 565 n \* (Apr 30, 1981) ("SCIRP Staff Report"). But there was no federal prohibition, and the states generally declined to enforce their own laws. SCIRP Staff Report at 565 n \* ("As for the state laws, they have been enforced only in California and Kansas. In California, enforcement has been effectively suspended . . . . The sole case of successful prosecution occurred in Kansas in 1977 and resulted in a fine of \$250 against an employer.").

<sup>&</sup>lt;sup>3</sup> One important exception is David Bacon, a longtime and forceful critic. See, for example, David Bacon, Justice Deported, Am Prospect (Dec 14, 2006), available at <a href="http://www.prospect.org/cs/articles?article=justice\_deported">http://www.prospect.org/cs/articles?article=justice\_deported</a> (last visited August 6, 2007) ("Unions and immigrants both need a bill that would mandate what they've advocated since 1999—the repeal of employer sanctions . . . . [S]anctions deny basic labor rights to millions"). See also Muzaffar Chishti, Employer Sanctions Against Immigrant Workers, Working USA 74 (Mar-Apr, 2000), available at <a href="http://www.prospect.org/cs/">http://www.prospect.org/cs/</a>

analyzed whether sanctions achieve their twin purposes of deterring illegal immigration and protecting United States workers. Nevertheless, all serious proposals for immigration reform now under debate assume the continuation and even intensification of the prohibition on employment of unauthorized immigrants.

194

Congress's enactment of employer sanctions followed many years of study by a bipartisan congressional committee, academic researchers, and non-governmental organizations, as well as the production of several extensive sets of policy recommendations.4 Substantively, the employer sanctions provisions forbid an employer from "knowingly" hiring or employing any unauthorized worker. IRCA also created new paperwork requirements, obligating employers to examine an employee's work authorization documents and complete a Form I-9 within three days of hire. Congress established civil and criminal penalties for violations of either the substantive prohibition on employment or the paperwork requirements.<sup>5</sup> Congress also repealed the "Texas proviso" that had shielded employers from criminal liability for employing unauthorized immigrants,6 and extended the criminal prohibition on the use of fraudulent documents in immigration matters to penalize their use in connection with private employment. In short, for the first time in our nation's history, IRCA made employment of undocumented immigrants unlawful across the country.8

articles?article=justice\_deported> (last visited August 6, 2007) (stating that the employer-sanctions law "has, ironically, become a highly useful tool in the hands of unscrupulous employers in their ability to suppress workers' rights").

<sup>&</sup>lt;sup>4</sup> Most significant was the Select Commission on Immigration and Refugee Policy ("SCIRP"), established by Congress in 1978, which completed its work in 1981. See U.S. Immigration Policy and the National Interest: The Final Report and Recommendations of the Select Commission on Immigration and Refugee Policy with Supplemental Views by Commissioners, 97th Cong, 1st Sess (Mar 1, 1981) ("SCIRP Final Report"). See also Immigration Reform and Control Act of 1986, Conference Report, 132 Cong Rec S16611, 16614 (Oct 16, 1986) (statement of Senator Simpson) (IRCA was SCIRP's "basic work product").

<sup>&</sup>lt;sup>5</sup> IRCA § 101, codified at 8 USC § 1324a (2000) (prohibiting knowing employment of unauthorized workers and establishing criminal and civil penalties for violations).

<sup>&</sup>lt;sup>6</sup> As a result, employers are now criminally liable under the "harboring" statute, as well as the employer sanctions provisions, for employment of undocumented immigrants. See, for example, *United States v Kim*, 193 F3d 567, 573–74 (2d Cir 1999) (affirming criminal conviction of factory owner who knowingly employed undocumented workers for violation of harboring statute).

 $<sup>^7</sup>$  IRCA  $\ 103$  , codified at 18 USC  $\ 1546(b)$  (establishing criminal penalties for use of false documents to establish work authorization under  $\ 1324a)$ .

<sup>&</sup>lt;sup>8</sup> IRCA contained numerous other provisions as well, notably a one-time amnesty program that eventually resulted in allowing approximately three million people to obtain lawful permanent residence. IRCA § 201, codified at 8 USC § 1255a. IRCA also made

# 193] Prohibiting Employment of Unauthorized Immigrants 195

It is time to consider whether, and if so to what extent, the employer sanctions regime has deterred illegal immigration and protected U.S. labor markets. This article argues that the prohibition on employment has achieved neither of its purposes, and in fact has led to increased workplace exploitation of undocumented immigrants, strengthened the "jobs magnet" that sanctions aimed to weaken, encouraged illegal immigration, and eroded wages and working conditions for U.S. workers. Sanctions have also increased workplace discrimination and undermined public safety and homeland security by driving millions of undocumented immigrants and their families into the shadows of civic life, fearful that cooperation with ordinary law enforcement. public health, and other social programs may lead to their deportation.9 Furthermore, the prohibition on employment has operated to grant an unfair competitive advantage to outlaw firms that violate labor and immigration laws as against law-abiding firms that respect both. By delegating immigration enforcement powers to private employers, sanctions have created inherently exploitative conditions in the workplace. Employer sanctions have failed and should be abandoned.

The historical genesis of employer sanctions is not in dispute. In the 1980s, proponents of sanctions argued and some congressional and other research studies concluded, <sup>10</sup> first, that the "jobs magnet" in the United States inexorably attracted undocumented immigrants, who entered the country illegally or failed to depart upon the expiration of a visa, and second, that their presence had significant negative effects for domestic workers, especially "low-income, low-skilled Americans, who are the most likely to face direct competition" from the undocumented. <sup>11</sup> IRCA sought to influence the incentives for employers inclined to hire undocumented immigrants by prohibiting and penalizing the practice, thereby diminishing the strength of the "jobs mag-

discrimination in the verification of immigration status an unlawful employment practice, 8 USC § 1342b, expressly preempted state employer sanctions law, 8 USC § 1324a(h)(2), and directed labor enforcement funds to immigrant-intensive industries, IRCA § 111(d). See Richard E. Blum, Labor Standards Enforcement and the Results of Labor Migration: Protecting Undocumented Workers After Sure-Tan, The IRCA, and Patel, 63 NYU L Rev 1342 (1988) (analyzing labor enforcement provisions of IRCA § 111(d)).

<sup>&</sup>lt;sup>9</sup> See President George W. Bush, New Temporary Worker Program: Remarks by the President on Immigration Policy (Jan 7, 2004), available at <a href="http://www.whitehouse.gov/news/releases/2004/01/20040107-3.html">http://www.whitehouse.gov/news/releases/2004/01/20040107-3.html</a>> (last visited May 20, 2007). See also Michael J. Wishnie, Immigrants and the Right to Petition, 78 NYU L Rev 667, 673–79 (2003).

<sup>&</sup>lt;sup>10</sup> See, for example, SCIRP Final Report at 11 (cited in note 4).

 $<sup>^{11}</sup>$  Immigration Reform and Control Act of 1985, S Rep No 99-132, 99th Cong, 1st Sess 5 (1985).

196

net," deterring unlawful immigration, and safeguarding wages and working conditions for U.S. workers.

There was also a political rationale for employer sanctions. The provisions were part of a grand bargain and the principal quid pro quo for the one-time amnesty provision that was the other major element of IRCA.12 The AFL-CIO and NAACP supported employer sanctions, as did a variety of anti-immigrant and nativist organizations. Business groups, Latino organizations, and civil liberties groups, including the ACLU, U.S. Chamber of Commerce, and National Council of La Raza, opposed employer sanctions.<sup>13</sup> But even opponents of employer sanctions recognized that the prohibition on employment might be a reasonable price to pay for the IRCA amnesty provision, which led to the eventual legalization of three million people. Many predicted that employer sanctions would burden business, encourage discrimination in hiring, fail adequately to protect U.S. workers, and do little to discourage illegal immigration. But all agreed that the nation's immigration system was flawed and in need of reform, and IRCA promised both legalization and increased enforcement—politically, something for all sides.

Curiously, however, as Congress and the Administration struggled through complex and politically fraught negotiations in 2006 to enact comprehensive immigration reform, all major voices assumed that Congress would and should continue employer sanctions.<sup>14</sup> The same has been true thus far in 2007.<sup>15</sup>

<sup>&</sup>lt;sup>12</sup> See 8 USC § 1255a (2000). Although envisioned as a one-time measure in which persons present in the US since 1982 applied for amnesty within a one-year filing period, implementation of the amnesty prompted extensive litigation. See Courts Approve Settlement Agreements in LULAC/Newman, CSS; Filing Instructions Expected at End of March, 81 No 9 Interp Rel 275 (Mar 1, 2004).

<sup>13</sup> Peter Brownell, The Declining Enforcement of Employer Sanctions 1 (Migration Policy Institute ("MPI") Sept 1, 2005) (noting AFL-CIO and NAACP support for sanctions as early as 1970s), available at <a href="http://www.migrationinformation.org/Feature/display.cfm?id=332">http://www.migrationinformation.org/Feature/display.cfm?id=332</a> (last visited Feb 9, 2007). The U.S. Chamber of Commerce opposed sanctions from the beginning as "unworkable and costly." Nancy Humel Montwieler, The Immigration Reform Law of 1986: Analysis, Text, and Legislative History 6 (BNA 1987). Over time, the Chamber "relented from its hardline opposition," and by 1985, eventually offered "qualified support" for the grand compromise in IRCA: legalization in exchange for sanctions. Id at 7, 10.

<sup>&</sup>lt;sup>14</sup> Notably, in the aftermath of Hurricane Katrina, President Bush announced that the Department of Homeland Security would temporarily suspend enforcement of employer sanctions in affected regions. Gregory Rodriguez, La Nueva Orleans: Latino immigrants, many of them here illegally, will rebuild the Gulf Coast—and stay there, Los Angeles Times M1 (Sept 25, 2005).

<sup>&</sup>lt;sup>15</sup> See, for instance, the lead House immigration reform bill, Security Through Regularized Immigration and a Vibrant Economy Act of 2007, HR 1645 (2007) ("STRIVE Act"), Title III, Sec 301, and the lead Senate bill, The Border Security, Economic Opportunity,

This is particularly odd given that, in the years since 1986, some major proponents of employer sanctions, including the AFL-CIO and African-American civil rights organizations, have switched their view and now formally oppose sanctions<sup>16</sup>—even as the original critics of sanctions, such as the business community, remain opposed. Instead, the discussions are shaped by the national security needs of a post-September 11 world, concerns about economic competition in the 21st century, and the determination of both political parties to secure the mythical "Latino vote."

For example, in January 2004, President Bush offered a vague proposal for a mammoth new guest worker program;<sup>17</sup> since then, several major immigration reform measures have been introduced in Congress, sponsored by many of the most powerful legislators of each party, and in 2006 both the House and the Senate passed major immigration legislation.<sup>18</sup> But despite a consensus among business, labor, civil rights, Latino, and African American communities that employer sanctions should be abandoned,<sup>19</sup> each one of the major proposals that preceded Senate and House action, as well as the bills passed by each chamber, assumes the continuation of employer sanctions, and most seek to make more efficient the present system of document verification.<sup>20</sup> Even centrist immigration researchers and advo-

and Immigration Reform Act of 2007, S 1639 (2007), Title III, Sec 302.

<sup>&</sup>lt;sup>16</sup> AFL-CIO, Statement of the Executive Council (Feb 16, 2000), available at <a href="http://www.aflcio.org/aboutus/thisistheaflcio/ecouncil/ec0216200b.cfm">http://www.aflcio.org/aboutus/thisistheaflcio/ecouncil/ec0216200b.cfm</a> (last visited Feb 9, 2007); Brownell, Declining Enforcement at 6 (cited in note 13) (observing that NAACP reversed position in early 1990s to oppose sanctions).

<sup>&</sup>lt;sup>17</sup> See Bush, New Temporary Worker Program (cited in note 9).

<sup>&</sup>lt;sup>18</sup> Border Protection, Antiterrorism, and Illegal Immigration Control Act of 2005, HR 4437, 109th Cong, 1st Sess (Dec 6, 2005); Comprehensive Immigration Reform Act of 2006, S 2611, 109th Cong, 2d Sess (Apr 7, 2006).

<sup>&</sup>lt;sup>19</sup> See note 16 (citing AFL-CIO Executive Council statement), note 13 (citing US Chamber of Commerce statements).

<sup>&</sup>lt;sup>20</sup> See Secure America and Orderly Immigration Act, S 1033, 109th Cong, 1st Sess (May 12, 2005) (whose principal sponsors include Senators Ted Kennedy and John McCain); Secure America and Orderly Immigration Act, HR 2330, 109th Cong, 1st Sess (May 12, 2005); Comprehensive Enforcement and Immigration Reform Act of 2005, S 1438, 109th Cong, 1st Sess (July 20, 2005) (sponsored by Republican Senators John Cornyn and Jon Kyl); REAL GUEST Act of 2005, HR 3333, 109th Cong, 1st Sess (July 19, 2005) (sponsored by Representative Tom Tancredo); and Save America Comprehensive Immigration Act of 2005, HR 2092, 109th Cong, 1st Sess (May 4, 2005) (sponsored by Representative Jackson-Lee). See also Eliot Turner and Marc R. Rosenblum, Solving the Unauthorized Migrant Problem: Proposed Legislation in the US 2–3 (MPI Sept 1, 2005) (noting that all major legislation introduced in response to the President's proposal for new guestworker program includes "new ways to penalize such employers"), available at <a href="http://www.migrationinformation.org/Feature/display.cfm?id=333">http://www.migrationinformation.org/Feature/display.cfm?id=333</a> (last visited Feb 9, 2007).

cates presume that any liberalization of the current immigration regime will depend on another political trade for increased penalties and enforcement, including expanded employer sanctions provisions.<sup>21</sup>

198

# I. THE ORIGINS OF IRCA

During the first century of federal immigration regulation there was no prohibition on the employment of unauthorized immigrants, and as the Supreme Court observed, employment of immigrants was "at best" a "peripheral concern" of the INA.<sup>22</sup> Nevertheless, labor market considerations frequently influenced immigration rules, at times favoring liberalization (as in the massive *braceros* programs of the 1940s–60s) and in other periods constriction (as in the anti-Asian laws of the late 19th and early 20th centuries).<sup>23</sup> One prominent immigration historian concluded, "[i]t would be in fact difficult to determine where immigration policy ends and labor policy begins, the two are so closely interrelated."<sup>24</sup>

Indeed, Congress was careful to protect employers of undocumented immigrants from criminal sanction. Pursuant to the "Texas proviso," Congress specifically exempted such employers from the federal criminal penalties for "harboring" aliens when these penalties were enacted in 1952.<sup>25</sup> To be sure, undocumented immigrants could be arrested in the workplace and de-

<sup>&</sup>lt;sup>21</sup> See Spencer Abraham, et al, *Immigration and America's Future: A New Chapter: Report of the Independent Task Force on Immigration and America's Future* 45 (MPI Sept 2006) ("MPI Task Force") ("Recommendation #3: The Task Force recommends that mandatory employer verification and workplace enforcement be at the center of more effective immigration enforcement reforms."). The MPI Task Force was co-chaired by former Republican Senator and Bush cabinet member Spence Abraham and former Democratic Representative and 9-11 Commission co-chair Lee Hamilton. Its members included the leaders of immigration reform in both parties, such as Senators Edward Kennedy and John McCain, and its report is likely to prove influential in the continuing debate. See, for example, Editorial, *Looking Over the Wall*, NY Times A16 (Oct 9, 2006) (lauding recommendations of MPI Task Force).

<sup>&</sup>lt;sup>22</sup> De Canas v Bica, 424 US 351, 360 (1976).

<sup>&</sup>lt;sup>23</sup> See Grounds for Exclusion of Aliens under the Immigration and Nationality Act: Historical Background and Analysis, 100th Cong, 2d Sess 8 (1988) ("The Chinese Exclusion Act... was enacted out of a concern for protecting domestic labor from foreign competition, combined with racial prejudice.").

<sup>&</sup>lt;sup>24</sup> E.P. Hutchinson, Legislative History of American Immigration Policy 1789–1965 492 (Penn 1981). See also id at 502 ("Congress in designing immigration legislation has been responsive to considerations of the labor supply and the labor market.").

<sup>&</sup>lt;sup>25</sup> Harboring was criminalized in 1952, but employment was exempted from the start. 8 USC § 1324(a) (1952) ("Provided, however, That for the purposes of this section, employment (including the usual and normal practices incident to employment) shall not be deemed to constitute harboring.").

ported,<sup>26</sup> as they could be arrested anywhere, but such workers faced no additional immigration or other penalties because of their employment. Nor was the employer acting unlawfully merely by employing such workers. Further, labor and employment laws generally applied to all covered firms and workers, without regard to the immigration status of employees,<sup>27</sup> with the principal exception that deported workers could not pursue certain remedies.<sup>28</sup>

The earliest legislative proposals for federal penalties on employers who hire undocumented immigrants date to the 1950s,<sup>29</sup> but the first serious bill to accomplish this goal was introduced by Representative Peter Rodino in 1973, at the instigation of the AFL-CIO and NAACP.<sup>30</sup> The Rodino bill twice passed the House in the early 1970s and won some support from the Nixon and Ford Administrations, but it died in the Senate each time.<sup>31</sup> A 1977 Carter Administration bill containing a sanctions provision directed at a "pattern or practice" of hiring undocumented workers, as well as legalization measures, also went nowhere.<sup>32</sup> These proposals faced substantial and "spirited" opposi-

<sup>&</sup>lt;sup>26</sup> See, for example, *INS v Lopez-Mendoza*, 468 US 1032 (1984) (rejecting challenge to INS worksite raid resulting in arrest and deportation of workers).

<sup>&</sup>lt;sup>27</sup> See, for example, *NLRB v Apollo Tire Co, Inc*, 604 F2d 1180, 1884 (9th Cir 1979) (Kennedy concurring) (arguing that "if the NLRA were inapplicable to workers who are illegal aliens, we would leave helpless the very persons who most need protection from exploitative employer practices").

 $<sup>^{28}</sup>$  See Sure-Tan, Inc v NLRB, 467 US 883, 883 (1984) (noting that deported workers are ineligible for back pay or reinstatement under the National Labor Relations Act).

<sup>29</sup> See Betsy Cooper and Kevin O'Neil, Lessons from the Immigration Reform and Control Act of 1986, MPI Policy Brief No 3 (Aug 2005) (noting proposals by Senator Douglas in 1950s), available at <a href="http://www.migrationpolicy.org/pubs/PolicyBrief\_No3\_Aug">http://www.migrationpolicy.org/pubs/PolicyBrief\_No3\_Aug</a> 05.pdf> (last visited Feb 9, 2007); Michael Fix and Paul T. Hill, Enforcing Employer Sanctions; Challenges and Strategies 22 (RAND Corp/Urban Inst 1991) (same). The first formal proposal for sanctions may have been from the Truman Commission on Migratory Labor, which in 1951 recommended adopting sanctions to deter Mexican migration. Demetrios A. Papademetriou and B. Lindsay Lowell, Employer Sanctions: Expectations and Early Outcomes, in Michael Fix, ed, The Paper Curtain: Employer Sanctions' Implementation, Impact, and Reform 215, 216 (RAND Corp/Urban Inst 1991). On occasion, Congress had responded to concerns about exploitation of immigrant workers, see, for example, Padrone Act, Act of June 23, 1874, 18 Stat 251 (criminalizing trafficking and exploitation of Italian children); United States v Kozminski, 487 US 931, 947 (1988) ("Congress enacted the Padrone statute in 1874 'to prevent [this] practice of enslaving, buying, selling, or using Italian children"), but never by prohibiting the hire of undocumented immigrants.

<sup>&</sup>lt;sup>30</sup> Brownell, Declining Enforcement at 1 (cited in note 13).

<sup>&</sup>lt;sup>31</sup> SCIRP Final Report, *The Immigration Reform Law of 1986* at 4 (cited in note 13); Papademetriou and Lowell, *Employer Sanctions* at 216–17 & n 3 (cited in note 29) (listing Nixon, Ford, Carter, and Reagan Administration recommendations to adopt sanctions).

<sup>&</sup>lt;sup>32</sup> Montwieler, The Immigration Reform Law of 1986 at 4 (cited in note 13); SCIRP Final Report at 62 (cited in note 4). In 1974, Congress amended the Farm Labor Contraction.

tion, however, particularly from business groups and Latino organizations.<sup>33</sup>

A desire to reform immigration policies persisted in some quarters, and in 1978 Congress established the Select Commission on Immigration and Refugee Policy ("SCIRP"). The Select Commission held public hearings around the country, commissioned numerous papers from social scientists, historians, and other scholars, reviewed mountains of data, and after extensive study issued its final report (complete with seven volumes of appendices) in 1981. As the final report explained: "In the hearings the Select Commission has held and in the letters it has received, one issue has emerged as most pressing—the problem of undocumented/illegal migration." 34

The notion of prohibiting employers from hiring undocumented immigrants was controversial. The AFL-CIO endorsed sanctions in a 1980 Executive Council statement, and labor leaders testified at SCIRP hearings in support of the measure, as did the American Legion, the National Urban League, and environmental groups. Many business groups declined to offer public testimony, but as the SCIRP staff noted, "[t]heir previous opposition to employer sanctions is well known, and it is likely that they will continue to espouse their old position." Those business groups that did testify emphasized the regulatory burdens of sanctions and the unfairness of deputizing the private sector to enforce public immigration laws. Latino organizations, civil rights groups, and the U.S. Catholic Conference of Bishops also testified in opposition, emphasizing that sanctions would encourage employment discrimination by employers. 38

Despite the lack of public consensus, in 1981 the Select Commission proposed a host of detailed legislative reforms. At their core lay the suggestion of a grand bargain—legalization in exchange for employer sanctions and increased border enforcement—that formed the foundation for what became IRCA.<sup>39</sup> No-

200

tor Act of 1963 to prohibit the knowing employment of unauthorized workers. SCIRP Final Report at 61 n \*. See Farm Labor Contractor Registration Act Amendments of 1974, Pub L No 93-518, 88 Stat 1652.

<sup>&</sup>lt;sup>33</sup> Papademetriou and Lowell, Employer Sanctions at 217 (cited in note 29).

<sup>&</sup>lt;sup>34</sup> SCIRP Final Report at 35 (cited in note 4).

<sup>&</sup>lt;sup>35</sup> SCIRP Staff Report at App H 250-53 (cited in note 2) (summarizing AFL statement and testimony).

<sup>36</sup> Id at 251.

<sup>&</sup>lt;sup>37</sup> Id at 251-52.

<sup>38</sup> Id at 249, 253-54.

<sup>39</sup> SCIRP Final Report at xvi-xvii, xxvi-xxvii, 46-56, 59-71 (cited in note 4). The

tably, all eight members of Congress who served on the Select Commission voted to recommend adoption of employer sanctions.<sup>40</sup> SCIRP's rationale for sanctions was straightforward. Enormous wage disparities between the United States and many other nations attract undocumented immigrants to the U.S. labor market, and these disparities cannot likely be overcome by intensified U.S. penalties. Border and interior enforcement are inadequate to deter new illegal immigration or to locate and arrest persons already present in the United States. Employer incentives can be adjusted, however, through the imposition of penalties for hiring undocumented workers, especially when combined with enhanced labor standards enforcement. If fewer employers are willing to hire undocumented workers, Congress will achieve its twin goals of deterring illegal immigration and protecting U.S. workers.<sup>41</sup>

Following completion of its report, Senator Alan Simpson and Representative Romano Mazzoli held several days of hearings on the Select Commission's recommendations, and the next month, the Reagan Administration endorsed a similar package of reforms: increased border and interior enforcement, employer sanctions, and legalization, plus a temporary guestworker program.<sup>42</sup> In 1982, Simpson and Mazzoli introduced legislation to codify this compromise package, and they continued to introduce the legislation annually until IRCA was passed in 1986.

The Simpson-Mazzoli legislation initially drew criticism from all directions. Business groups opposed sanctions as burdensome and inefficient, civil rights and Latino groups opposed sanctions as likely to spur employment discrimination, and Western agricultural interests and organized labor weighed in with various objections. Indeed, agribusiness interests were "frank about their dependence on undocumented labor and the severe financial problems that sanctions would impose."

Commission debated proposals for a new guestworker program as well, noting the experience of European countries and that of the U.S. during the notorious braceros program. In the end, the Commission did not recommend a large-scale temporary worker program, although it did suggest some reforms to the visa program for farmworkers. Id at 45. The possibility of a special farmworker category, insisted upon by Western growers, would tie up Congress in its effort to enact broad reforms until a last-minute compromise in 1986.

<sup>&</sup>lt;sup>40</sup> SCIRP Staff Report at 566 (cited in note 2).

<sup>&</sup>lt;sup>41</sup> SCIRP Final Report at 59–71 (cited in note 4). See also SCIRP Staff Report at 559–71 (cited in note 2). The Select Commission specifically rejected a proposal to increase penalties on undocumented workers beyond deportation itself. SCIRP Final Report at 66 (cited in note 4).

<sup>42</sup> Montwieler, The Immigration Reform Law of 1986 at 5 (cited in note 13).

<sup>&</sup>lt;sup>43</sup> Fix and Hill, Enforcing Employer Sanctions at 28 (cited in note 29). Agribusiness

Proponents of sanctions responded with various arguments. Labor unions and the NAACP insisted that protection of U.S. workers, especially low-wage and African-American workers, demanded that employers be prohibited from hiring undocumented immigrants. Some "law-and-order" partisans emphasized the implications for the nation's sovereignty of its failure to control the borders, 44 while other sanctions supporters lamented the impact on natural resources and worried about the fiscal consequences for welfare programs, public education, and other government services of continued large-scale migration. 45 Some warned, darkly, of the social and cultural implications of Latin American migration, legal and illegal. 46

In fall 1986, tortuous and prolonged congressional negotiations finally yielded a deal on an expanded agricultural guest-worker program. Both the U.S. Chamber of Commerce and the AFL-CIO had come to support the overall package, including the employer sanctions provisions that business interests had previously opposed,<sup>47</sup> notwithstanding continuing business objections to a regulatory policy that deputized the private sector to enforce public immigration laws.<sup>48</sup>

A conference bill containing the principal elements of the blueprint set forth in the SCIRP Report emerged from committee, and passage was secured.<sup>49</sup> Major stakeholders were resigned to the compromise legislation that was, on the whole, likely to favor their interests.<sup>50</sup> "It isn't the Sistine Chapel, but

202

remains candid about its dependency on immigrant labor to this day. See *Inmates Will Replace Wary Migrants in Colorado Fields*, NY Times A25 (Mar 4, 2007) (reporting that Colorado has expanded its prison labor program to replace immigrant agricultural workers deterred from working in state by new state penalties).

<sup>&</sup>lt;sup>44</sup> See, for example, Fix and Hill, *Enforcing Employer Sanctions* at 22–23 (cited in note 29) (quoting Attorney General Edwin Meese's statement that "We cannot fairly speak of ourselves as a sovereign nation if we cannot responsibly decide who may cross our borders").

<sup>45</sup> Id at 26-27.

<sup>&</sup>lt;sup>46</sup> Id at 25-26.

<sup>&</sup>lt;sup>47</sup> Montwieler, The Immigration Reform Law of 1986 at 10 (cited in note 13).

<sup>&</sup>lt;sup>48</sup> See, for example, Editorial, *The Immigration Nightmare*, Wall St J 22 (Nov 10, 1986) (criticizing IRCA, especially sanctions provisions); William H. Miller, *Alive and kicking; immigration bill gains, could still pass in '86*, Industry Week (July 21, 1986) (noting "heavy opposition by business lobbyists" to employer sanctions); Annelise Anderson, *Employer Sanctions Don't Work Elsewhere*, Wall St J 1 (Sept 9, 1986) ("the employer-sanctions approach is fundamentally flawed").

<sup>&</sup>lt;sup>49</sup> Montwieler, The Immigration Reform Law of 1986 at 14-18 (cited in note 13).

<sup>&</sup>lt;sup>50</sup> Id at 6-14.

it's not a bad paint job," commented Representative Dan Lungren, one of the many central players in IRCA's passage.<sup>51</sup>

Congress, like SCIRP before it, described the primary purposes of IRCA as discouraging illegal immigration and protecting U.S. workers from wage competition with undocumented workers. Employer sanctions and legalization were the means to achieve these goals, frequently termed the "keystone" of IRCA.

The principal means of . . . curtailing future illegal immigration[] is through employer sanctions . . . . Employers will be deterred by the penalties in this legislation from hiring unauthorized aliens and this, in turn, will deter aliens from entering illegally or violating their status in search of employment.<sup>52</sup>

Supporters of sanctions intended that over time IRCA would establish a new employment standard, one that would become a familiar, widely-accepted principle of the workplace, akin to minimum-wage laws and Title VII's anti-discrimination rules.<sup>53</sup>

Consistent with the focus on altering employer incentives to hire and exploit immigrant workers, Congress also directed the U.S. Department of Labor to target its wage-and-hour enforcement activities so as to "deter the employment of unauthorized aliens and remove the economic incentive for employers to exploit and use such aliens." Senator Simpson himself emphasized the importance of labor enforcement in achieving immigration goals: "We are all aware that the answer to illegal immigration rests with increased border enforcement, and increased labor law enforcement." Senator Ted Kennedy made the same point in his supplemental statement in the SCIRP report. 56

<sup>&</sup>lt;sup>51</sup> Id at 17

<sup>&</sup>lt;sup>52</sup> Immigration Reform and Control Act of 1986, HR Rep No 99-682(I), 99th Cong, 2d Sess 46 (1986), reprinted in 1986 USCCAN 5649, 5650. See, for example, S Rep No 99-132 at 1 (cited in note 11) ("The primary incentive for illegal immigration is the availability of U.S. employment.").

<sup>53</sup> Robert Bach and Doris Meissner, Employment and Immigration Reform: Employer Sanctions Four Years Later, in Fix, ed, The Paper Curtain 281, 284-85 (cited in note 29).

<sup>&</sup>lt;sup>54</sup> IRCA § 111(d). See also SCIRP Final Report at 70 (cited in note 4) ("[T]he Select Commission urges the increased enforcement of existing wage and working standards legislation."); SCIRP Staff Report at App H 261 (cited in note 2) (noting that in SCIRP public hearings, "[t]here was no disagreement on the proposal to more vigorously enforce wage and working standards legislation").

<sup>&</sup>lt;sup>55</sup> Immigration Reform and Control Act of 1985, Hearings on S 1200 before the Subcommittee on Immigration and Refugee Policy of the Senate Committee on the Judiciary, 99th Cong, 1st Sess 27 (1985).

<sup>&</sup>lt;sup>56</sup> SCIRP Final Report at 357 (cited in note 4) ("We must ... intensify the enforce-

Congress also took pains to ensure that courts and executive branch agencies would not construe IRCA as excluding immigrants from mainstream labor protections, for the obvious reason that any such exclusion would increase employer incentives to prefer undocumented workers and therefore undermine IRCA's purposes. Thus, the House Judiciary Committee report accompanying IRCA stated:

204

It is not the intention of the Committee that the employer sanctions provisions of the bill be used to undermine or diminish in any way labor protections in existing law, or to limit the powers of federal or state labor relations boards, labor standards agencies, or labor arbitrators to remedy unfair practices committed against undocumented employees.<sup>57</sup>

Likewise, the House Education and Labor Committee reported that to reduce labor protections for undocumented immigrants would "be counter-productive of [the] intent to limit the hiring of undocumented employees and the depressing effect on working conditions caused by their employment."58

In short, IRCA's enactment followed years of bipartisan discussion, study, and debate and adhered remarkably closely to the core structure outlined by the Select Commission. The choice to use employer sanctions to alter employer hiring incentives, diminishing demand for undocumented workers and thereby deterring illegal immigration, was deliberate and explicit. Guided by the SCIRP recommendations, Congress chose not to penalize workers for accepting employment without authorization but instead to increase labor standards enforcement as a necessary feature of the broad effort to discourage employers from hiring unauthorized immigrants. Maintenance of all existing labor protections for undocumented immigrants furthered the goal of discouraging their employment.

At the time of IRCA's enactment, best estimates placed the undocumented population at approximately 4 million people.<sup>59</sup>

ment of existing [labor] laws .... Vigorous and effective enforcement of these laws will reduce the incentive for employers to hire undocumented workers."). Senator Kennedy introduced the amendment that became IRCA § 111(d). Immigration Reform and Control, S Rep No 98-62, 98th Cong, 1st Sess 29 (1983).

<sup>&</sup>lt;sup>57</sup> HR Rep No 99-682(I) at 58 (cited in note 52).

<sup>&</sup>lt;sup>58</sup> Immigration Reform and Control Act of 1986, HR Rep No 99-682(II), 99th Cong, 2d Sess 9 (1986), reprinted in 1986 USCCAN 5757, 5758.

<sup>&</sup>lt;sup>59</sup> Jeffrey S. Passell, Unauthorized Migrants: Numbers and Characteristics 10 (Pew

# II. THE CONSEQUENCES OF IRCA

In evaluating the results of employer sanctions, several aspects of twenty years' experience with IRCA stand out. First, after an initial dip caused by IRCA's legalization program, the undocumented population in this country has grown tremendously. Second, employer sanctions have caused substantial employment discrimination. Third, despite contrary legislative intent, courts have interpreted the employer sanctions provisions as excluding undocumented workers from the mainstream of federal and state labor and employment protections. These judicial interpretations have functioned to exempt employers who hire undocumented immigrants from ordinary liability for the violation of basic workplace rights. This functional immunity, in turn, has undermined the deterrent effects of sanctions on the hiring of undocumented employees. Fourth, although the numbers have varied somewhat over two decades, overall, INS and then ICE have deprioritized enforcing employer sanctions relative to other immigration enforcement responsibilities. Fifth, major proponents of employer sanctions from the 1970s and 1980s have changed positions, such that the AFL-CIO, business interests, civil rights groups, and Latino and African-American organizations now concur that sanctions have failed and should be abandoned. Finally, and most perniciously, the sanctions regime has granted to employers an enormous, coercive power over their non-citizen workers and over low-wage U.S. workers who compete with them. Nothing in this record indicates that the prohibition on employment of unauthorized immigrants has succeeded nor that it should be continued and intensified.

# A. Growth in Undocumented Population

In the first few years after IRCA's enactment, most estimates held that the total undocumented population in the U.S.

Hispanic Trust June 14, 2005), available at <a href="http://pewhispanic.org/reports/report.php?">http://pewhispanic.org/reports/report.php?</a> ReportID=46> (last visited Feb 9, 2007). Government estimates put the undocumented population at between 3.5 and 6 million in 1986. SCIRP Final Report at 36 (cited in note 4). Demographers estimated that approximately seven-hundred thousand new undocumented immigrants entered the U.S. or overstayed their visas each year (averaged between 2000 and March 2004), Passell, Unauthorized Migrants at 5 (cited in this note), while U.S. government estimates throughout the late 1980s and 1990s put the net annual increase in the undocumented population at nearly three-hundred thousand. See, for instance, 2000 Statistical Yearbook of the Immigration and Naturalization Service, at 271–72, available at <a href="http://www.dhs.gov/ximgtn/statistics/publications/archive.shtm">http://www.dhs.gov/ximgtn/statistics/publications/archive.shtm</a> (last visited May 30, 2007).

206

declined. This decline was principally due not to fewer illegal entries, but to the legalization of approximately three million persons.<sup>60</sup>

Today there are approximately twelve million undocumented immigrants in the United States, 61 with a net annual increase in the 1990s of approximately five-hundred thousand persons. 62 This is a dramatic increase from the estimated four million undocumented persons present in the U.S. when IRCA was enacted. When one considers that nearly 3 million persons regularized their status pursuant to IRCA's legalization program, the two-decade increase becomes even more startling. Many factors have influenced the growth in the undocumented population, of course, and no reliable regression analysis exists to determine the precise causal role of any one factor, but at first glance, these figures do not suggest IRCA has been a success. 63

The overwhelming majority of the undocumented are from Latin America (78 percent), and more than half are from Mexico alone (56 percent).<sup>64</sup> Perhaps 25 to 40 percent have overstayed a visa; the balance crossed the border unlawfully.<sup>65</sup> Of the nearly 12 million undocumented persons, 1.8 million are children.<sup>66</sup> Most undocumented immigrants live in families.<sup>67</sup> Their labor

<sup>&</sup>lt;sup>60</sup> Papademetriou and Lowell, *Employer Sanctions* at 225 (cited in note 29) (summarizing data regarding border apprehensions, and household surveys in sending communities, and concluding "to date, there has been relatively little reduction in illegal entries"); id at 226 (concluding data indicated that by 1988, number of visa overstayers "had basically returned to pre-IRCA levels").

<sup>&</sup>lt;sup>61</sup> Jeffrey S. Passell, The Size and Characteristics of the Unauthorized Migrant Population in the U.S. 1 (Pew Hispanic Center Mar 7, 2006) (estimating unauthorized population at 11.5–12 million in March 2006), available at <a href="http://pewhispanic.org/reports/report.php?ReportID=61">http://pewhispanic.org/reports/report.php?ReportID=61</a> (last visited Feb 9, 2007); Abraham, et al, MPI Task Force at 19–20 (cited in note 21).

<sup>62</sup> Passell, Unauthorized Migrants at 1, 10 (cited in note 59). In the decade 1995—2004, between seven hundred and seven hundred and fifty thousand persons entered the U.S. unlawfully or overstayed a visa each year, id at 6, but approximately two hundred thousand died, departed, or regularized their status each year, yielding a net increase in the undocumented population of approximately one-half million persons annually. Jennifer Van Hook, Frank D. Bean, and Jeffrey Passel, Unauthorized Migrants Living in the United States: A Mid-Decade Portrait 2 (MPI 2005), available at <a href="http://www.migrationinformation.org/Feature/display.cfm?id=329">http://www.migrationinformation.org/Feature/display.cfm?id=329</a> (last visited Feb 9, 2007).

<sup>&</sup>lt;sup>63</sup> In addition to IRCA's influence, if any, those factors surely include harsh amendments to the immigration laws in 1990 and 1996 that narrowed the opportunities for many unauthorized immigrants to regularize their status, shifting global economic conditions, and substantial backlogs in processing family- and employment-based visas and naturalization applications.

<sup>&</sup>lt;sup>64</sup> Passell, Size and Characteristics at 4 (cited in note 61).

<sup>65</sup> Id at 9.

<sup>66</sup> Id at 7-8.

<sup>67</sup> Id at 18.

force participation rates, particularly for men, are high, although concentrated in low-wage, low-skilled positions.<sup>68</sup>

# B. Increased Employment Discrimination

In 1990, a Government Accountability Office ("GAO") study concluded that employer sanctions had prompted significant discrimination in employment, as Latino and immigrant rights critics had warned. In particular, in a national survey of 4.6 million employers, GAO determined that a startling 19 percent had engaged in discriminatory behavior. The employer discrimination included not "hir[ing] job applicants whose foreign appearance or accent led [employers] to suspect that they might be unauthorized aliens," "appl[ying] IRCA's verification system only to persons who had a 'foreign' appearance or accent," or "hiring only persons born in the United States or not hiring persons with temporary work eligibility documents."

GAO attributed this widespread discrimination not to employer bias or anti-immigrant animus, however, but primarily to "employers' lack of understanding of requirements, employers' confusion about eligibility determinations, and the prevalence of fraudulent documents." The Comptroller General summarized these findings to Congress: "GAO also found that there was widespread discrimination. But was there discrimination as a result of IRCA? That is the key question Congress directed GAO to answer. GAO's answer is yes."

In addition to its findings of widespread employment discrimination, the GAO suggested that sanctions appeared to have reduced illegal immigration for the reasons intended by Congress: employment of undocumented workers had declined and fewer persons were therefore making the dangerous border crossing.<sup>73</sup> The GAO did not undertake an extensive analysis of this key question, devoting three pages of its lengthy report to summarize research done primarily by other entities, including a report by the Urban Institute and preliminary findings by the

<sup>68</sup> Passell, Size and Characteristics at 25-30 (cited in note 61).

<sup>&</sup>lt;sup>69</sup> United States General Accounting Office, *Immigration Reform: Employer Sanctions and the Question of Discrimination*, GAO/GGD-90-62 (GAO 1990), available at <a href="http://www.gao.gov/docdblite/summary.php?rptno=GGD-90-62">http://www.gao.gov/docdblite/summary.php?rptno=GGD-90-62</a> (last visited Feb 9, 2007).

<sup>&</sup>lt;sup>70</sup> Id at 5–7.

<sup>&</sup>lt;sup>71</sup> Id at 3.

<sup>72</sup> Id.

<sup>73</sup> GAO, Immigration Reform at 103-06 (cited in note 69).

RAND Corporation. GAO itself reported on a small survey of immigrants arrested in worksite enforcement operations,<sup>74</sup> but several of the other studies noted by GAO failed to show that IRCA had reduced illegal immigration.<sup>75</sup>

# C. IRCA Proponents Now Oppose Sanctions

208

One important consequence of the 1990 GAO study was to prompt the NAACP to reverse course, abandoning its prior support for sanctions and instead declaring its opposition to the approach. A decade later, the AFL-CIO also switched positions and declared its formal and public opposition to sanctions. The labor movement's change was a product not only of the evidence that sanctions caused employment discrimination, but also of an internal struggle among unions embracing traditional protectionist impulses, perhaps reflecting a residual nativism, and other unions that had successfully organized immigrant-intensive industries where employers used the sanctions provisions to retaliate against organizing employees.

Although business groups did moderate their long-standing opposition to sanctions in the run-up to IRCA's adoption, they have not generally embraced sanctions. Many employers found the paperwork requirements less onerous than feared, and in the absence of vigorous enforcement by INS, business was not "in the forefront of repeal efforts" in the late 1980s and early 1990s. Nevertheless, business remains opposed on principle to sanctions as unnecessary regulation of the private workplace and as an

<sup>&</sup>lt;sup>74</sup> This survey found that 16 percent of arrested workers reported having been refused a job because of IRCA's document verification requirements. Id at 104.

<sup>&</sup>lt;sup>75</sup> Id at 105–06 (noting RAND found initial reduction in illegal immigration but observed that long-term effects were unclear; Current Population Survey of US Census Bureau concluded it was "not possible to make a determination" whether IRCA had affected illegal immigration; and a University of Chicago study found "no evidence" that IRCA had reduced illegal immigration).

<sup>&</sup>lt;sup>76</sup> Brownell, Declining Enforcement at 6 (cited in note 13).

<sup>&</sup>lt;sup>77</sup> See AFL-CIO, Statement of the Executive Council (cited in note 16). For a recent affirmation of this position, see, for example, Letter to Senator Kennedy from SEIU Leaders (Jan 16, 2007) ("We must replace the current regime of employer sanctions with vigorous labor and civil rights law enforcement."), available at <a href="http://www.seiu.org/media/pressreleases.cfm?pr\_id=1366">http://www.seiu.org/media/pressreleases.cfm?pr\_id=1366</a> (last visited May 30, 2007).

<sup>&</sup>lt;sup>78</sup> Catherine Fisk and Michael Wishnie, *The Story of Hoffman Plastic Compounds*, Inc. v. NLRB: *Labor Rights without Remedies for Undocumented Immigrants*, in Laura Cooper and Catherine Fisk, eds, *Labor Law Stories* 401 (Foundation Press 2005), available at <a href="http://eprints.law.duke.edu/archive/00001243/">http://eprints.law.duke.edu/archive/00001243/</a>> (last visited Feb 9, 2007).

<sup>&</sup>lt;sup>79</sup> Bach and Meissner, *Employment and Immigration Reform* at 289 (cited in note 53).

unfair deputization of the private sector to conduct public law enforcement.<sup>80</sup>

# D. Low Government Enforcement

Another important trend of the 1990s was a significant decline in government enforcement of employer sanctions. Employer audits (inspection by INS or, now, ICE, of employer I-9 forms) have declined 77 percent since 1990, from nearly 10,000 to fewer than 2,200 in 2003.81 Warnings to employers found after audit to have violated I-9 verification or record-keeping requirements have declined 62 percent in the same period, from nearly 1,300 in 1990 to fewer than 500 in 2003.82 Final orders in fine proceedings against employers have declined 82 percent, from nearly 1,000 in 1990 to 124 in 2003.83 The number of fines is certain to fall further still, as the government issued a total of only three "notices of intent to fine"—the document that commences a fine proceeding against an employer—in all of 2004.84 Finally, with fewer resources devoted to investigating and prosecuting employers who violate IRCA, immigration authorities have made fewer worksite enforcement arrests of undocumented immigrants.85 Even with a recent spike in worksite enforcement, at a time when the Bush Administration appears intent on demonstrating its commitment to immigration enforcement generally, these figures are unlikely to change dramatically in 2006 or 2007.

There are several reasons for the decline in government enforcement of employer sanctions. First, agency enforcement priorities have shifted over time.<sup>86</sup> By the mid-1980s, INS had begun to focus enforcement resources on deportation of persons with criminal convictions, a trend which has continued to this

PI 08

<sup>81</sup> Brownell, Declining Enforcement at 3 fig 1 (cited in note 13).

<sup>82</sup> Id at 3-4 fig 2.

<sup>83</sup> Id at 4-5 fig 3. Fines collected have also decreased at a similar rate. Id at fig 4. Years refer to fiscal years, not calendar years.

<sup>&</sup>lt;sup>84</sup> United States General Accountability Office, *Immigration Enforcement: Preliminary Observations on Employment Verification and Worksite Enforcement*, GAO-05-822T at 14 & fig 3 (GAO 2005), available at <a href="http://www.gao.gov/docdblite/summary.php?rptno=GAO-05-822T">http://www.gao.gov/docdblite/summary.php?rptno=GAO-05-822T</a> (last visited Feb 9, 2007).

 $<sup>^{85}</sup>$  In 2003, ICE worksite enforcement arrests totaled only 445 for the entire nation, down 84 percent from 1999. Id at 15 & fig 4.

<sup>&</sup>lt;sup>86</sup> Id at 12 ("Worksite enforcement was a low priority for INS and continues to be a low priority for ICE.").

day.<sup>87</sup> In 1994, INS launched a major enforcement operation along the southwest border, known as "Operation Gatekeeper," and redeployed agents from sanctions enforcement to this mission.<sup>88</sup> In 1999, INS announced new interior enforcement priorities which emphasized anti-smuggling and criminal investigations and downplayed worksite operations.<sup>89</sup> After the terrorist attacks of September 11, worksite enforcement stopped almost completely, with the exception of targeted investigations of security-related locations such as airports and nuclear reactors.<sup>90</sup>

210

Second, employer sanctions target *employers*, not undocumented immigrants, by obligating employers to verify status and to refuse to hire unauthorized workers. Federal immigration authorities have traditionally targeted *non-citizens*, however, and this reorientation may not be fully embraced within the immigration agency, which frequently "negotiate[s] down" fine amounts recommended by agents in subsequent discussions with employers or their counsel.<sup>91</sup> Moreover, politicians of both parties regularly intervene when INS worksite enforcement disrupts important local industries.<sup>92</sup>

Finally, amendments since 1986 have strengthened employer defenses, making it more difficult for the government to prove a substantive violation of the "knowing employment" requirements, and no doubt discouraging some prosecutions. The ready availability of false documents has "also made it difficult

<sup>&</sup>lt;sup>87</sup> See Jason Juffras, IRCA and the Enforcement Mission of the Immigration and Naturalization Service, in Fix, ed, The Paper Curtain 33, 47–50 (cited in note 29) (describing GAO studies in the 1980s in addition to public concern about drug offenses and other crime contributing to congressional efforts to direct INS enforcement towards "criminal alien" problems).

<sup>88</sup> Brownell, Declining Enforcement at 6 (cited in note 13).

<sup>&</sup>lt;sup>89</sup> INS, Interior Enforcement Strategy, (INS 1999), available at <a href="http://www.vkblaw.com/news/fiftyfour.htm">http://www.vkblaw.com/news/fiftyfour.htm</a> (last visited May 30, 2007).

<sup>&</sup>lt;sup>90</sup> GAO, *Immigration Enforcement* at 18 (cited in note 84) ("In keeping with the primary mission of DHS to combat terrorism, after September 11, 2001, INS and then ICE has focused its resources for worksite enforcement on identifying and removing unauthorized workers from critical infrastructure sites."); Brownell, *Declining Enforcement* at 6 (cited in note 13).

<sup>91</sup> GAO, Immigration Enforcement at 17 (cited in note 84).

<sup>92</sup> David Bacon, And the Winner Is . . . : Immigration Reform on the killing floor, American Prospect A12-14 (Oct 23, 2005), available at <a href="http://www.prospect.org/cs/article=and\_the\_winner\_is\_">http://www.prospect.org/cs/article=and\_the\_winner\_is\_</a> (last visited August 6, 2007) (Nebraska meatpacking industry); David Bacon, Immigration Law - Bringing Back Sweatshop Conditions (Oct 11, 1998), available at <a href="http://dbacon.igc.org/Imgrants/11sanctn.html">http://dbacon.igc.org/Imgrants/11sanctn.html</a> (last visited August 6, 2007) (Georgia onion industry).

for ICE agents to prove that employers knowingly hired unauthorized workers."93

# E. Erosion of Labor Rights for the Undocumented

One of the most direct and corrosive effects of employer sanctions has been the undermining of labor and employment rights for undocumented immigrants who, notwithstanding IRCA's prohibition, find work in this country. Before IRCA, courts and executive-branch agencies generally enforced labor and employment laws without regard for the immigration status of the employee.94 This practice was sensible, as few federal or state workplace statutes included immigration status among their exemptions from coverage, and employment of undocumented immigrants was not unlawful in any event. The Supreme Court did carve out an exception for workers who were deported to another country, holding that such workers were ineligible for certain remedies under the National Labor Relations Act ("NLRA"),95 but this exception affected relatively few workers. Even after IRCA's enactment, most courts and agencies continued to enforce federal and state labor laws on behalf of all workers regardless of immigration status, including seeking all remedies but reinstatement, given that IRCA had prohibited the knowing employment of unauthorized workers. 96 Employers regularly argued that IRCA now exempted them from ordinary labor and employment liability, but courts and agencies rarely agreed.

<sup>&</sup>lt;sup>93</sup> GAO, Immigration Enforcement at 16 (cited in note 84). See also United States General Accounting Office, Illegal Aliens: Significant Obstacles to Reducing Unauthorized Alien Employment Exist, GAO/GGD-99-33 at 2 (1999) (observing prevalence of false documents impairs INS capacity to prove employer knowingly hired undocumented workers), available at <a href="http://www.gao.gov/docdblite/summary.php?rptno=GGD-99-33">http://www.gao.gov/docdblite/summary.php?rptno=GGD-99-33</a> (last visited Feb 9, 2007).

<sup>&</sup>lt;sup>94</sup> See, for example, *Donovan v Burgett Greenhouses*, *Inc*, 759 F2d 1483, 1485 (10th Cir 1985) (enforcing Fair Labor Standards Act against employer of undocumented workers); *NLRB v Apollo Tire Co*, 604 F2d 1180 (9th Cir 1979) (undocumented worker covered by NLRA); *Nizamuddowlah v Bengal Cabaret, Inc*, 415 NYS2d 685, 685–86 (App Div 1979) (undocumented worker covered by state minimum wage and overtime law).

<sup>&</sup>lt;sup>95</sup> Sure-Tan, Inc v NLRB, 467 US 883 (1984). See also Michael J. Wishnie, Emerging Issues for Undocumented Immigrants, 6 U Pa J Lab & Emp L 497 (2004).

<sup>&</sup>lt;sup>96</sup> See, for example, NLRB v APRA Fuel Oil Buyers Group, Inc, 134 F3d 50 (2d Cir 1997) (after IRCA, NLRA still allows back pay award to undocumented worker); Patel v Quality Inn, 846 F2d 700, 704 (11th Cir 1988) (same, as to FLSA); EEOC v Switching Sys Div of Rockwell Int'l Corp, 783 F Supp 369, 374 (N D Ill 1992) (same, as to Title VII); Dowling v Slotnik, 712 A2d 396, 405 (Conn 1998) (same, as to workers' compensation). Consider Wishnie, Emerging Issues for Undocumented Immigrants at 499–508 (cited in note 95).

The legal landscape changed radically when the Supreme Court decided Hoffman Plastic Compounds, Inc v NLRB.97 There the Court held that an employee who tendered false documents to his employer upon hire, and was later illegally discharged for union organizing, was eligible for neither back pay nor reinstatement.98 Relying explicitly on the employer sanctions and document fraud provisions of IRCA,99 the Supreme Court overturned decades of decisions by state and federal courts and agencies by exempting employers of undocumented workers from back pay liability. "We hold that [back pay under the NLRA] is foreclosed by federal immigration policy, as expressed by Congress in the Immigration Reform and Control Act of 1986 (IRCA)," declared Chief Justice Rehnquist for the Court. 100 The extensive legislative history demonstrating a congressional intent to preserve full labor protections for undocumented workers. lest employer incentives to hire them increase and the entire immigration-deterrent function of IRCA be undermined, did not trouble the Hoffman majority. 101 Since the Hoffman decision. lower courts and state and federal agencies have generally conformed to the conclusion that IRCA renders employers exempt from ordinary labor or employment liability, 102 albeit with some exceptions. 103

<sup>&</sup>lt;sup>97</sup> 535 US 137 (2002).

<sup>&</sup>lt;sup>98</sup> Id at 142

<sup>&</sup>lt;sup>99</sup> Id at 148 ("[IRCA] makes it a crime for an unauthorized alien ... [to] tender[] fraudulent documents."); id at 149 ("What matters here . . . is that Congress has expressly made it criminally punishable for an alien to obtain employment with false documents."); id at 151 ("We therefore conclude that allowing the Board to award backpay to illegal aliens would unduly trench upon explicit statutory prohibitions critical to federal immigration policy, as expressed in IRCA.").

<sup>100</sup> Id at 140.

 $<sup>^{101}</sup>$  The majority dispensed with the legislative history in a footnote. See Hoffman, 535 US at 149 n 4.

<sup>102</sup> See, for example, Sanchez v Eagle Alloy Inc, 658 NW2d 510 (Mich App 2003) (undocumented worker injured on job ineligible for wage-loss benefits under state worker compensation law); Reinforced Earth Co v Workers' Comp Appeal Board, 810 A2d 99 (Pa 2002) (same); NLRB Office of the General Counsel, Procedures and Remedies for Discriminatess Who May Be Undocumented Aliens after Hoffman Plastic Compounds, Inc., MEMORANDUM GC 02-06 § C(1)/3 (July 19, 2002) (NLRB General Counsel conclusion that, even where employer knowingly hires undocumented worker, employer is immune from back pay liability under NLRA), available at <a href="http://www.nlrb.gov/shared\_files/GC%20Memos/2002/gc02-06.html">http://www.nlrb.gov/shared\_files/GC%20Memos/2002/gc02-06.html</a> (last visited Feb 9, 2007).

<sup>&</sup>lt;sup>103</sup> See, for example, Rivera v NIBCO, Inc, 364 F3d 1057 (9th Cir 2004) (Hoffman may not apply to Title VII cases); Rosa v Partners in Progress, Inc, 868 A2d 994 (NH 2005) (undocumented workers remain eligible for workers' compensation benefits); Balbuena v IDR Realty LLC, 812 N.Y.S.2d 416 (NY 2006) (same as to benefits pursuant to state Scaffolding Law).

Apart from IRCA's formal exclusion of undocumented workers from the mainstream of labor and employment protections, as discerned by the Supreme Court in *Hoffman*, the decision and statute have deterred immigrants from communicating with labor and employment agencies about unlawful activity they have suffered or witnessed. IRCA has thus pushed more people deeper into the shadows, weakening or severing the civic ties that would otherwise connect millions of immigrants to agencies and officials whose public mission has nothing at all to do with immigration enforcement.<sup>104</sup> The social consequences of this phenomena reach more broadly than the undocumented immigrants themselves, extending to their families, co-workers, neighbors, unions, and other workers.<sup>105</sup>

# F. Unfair Business Competition

IRCA has also caused inevitable changes in business practices. In cost-sensitive, labor-intensive industries that rely on low-wage workers, employers who obey labor and immigration laws are at a competitive disadvantage with firms that hire undocumented workers and violate labor standards laws. Because the risk of being fined for an IRCA violation is slight and the cost-savings from employing and exploiting an undocumented worker potentially substantial (all the more so since *Hoffman*), unscrupulous employers have not hesitated to hire undocumented workers and to seize the unfair competitive advantage such a practice allows. <sup>106</sup>

This unfair competition effect was foreseeable and evident even in the early years after IRCA's passage. 107 After the passage of IRCA, many agricultural employers swiftly increased the use of farm labor contractors, who would be responsible for "compliance" with employer sanctions. In reality, these contractors

<sup>104</sup> See, for example, Wishnie, Right to Petition at 673-79 (cited in note 9).

<sup>&</sup>lt;sup>105</sup> Id. at 669, 673, 723, 736 (arguing that law enforcement policies that deter noncitizens from reporting crime and other illegal activities are unwise and may violate First Amendment right to petition the government for redress of grievances).

<sup>106</sup> See Brief Amici Curiae of Employers and Employer Organizations in Support of the NLRB, Hoffman Plastic Compounds, Inc v NLRB, No 00-1595, \*7-9 (US filed Dec 10, 2001) (for 535 US 137) (available on Westlaw at 2001 WL 1631729) (demonstrating that outlaw businesses prefer to hire and exploit undocumented immigrants so as to obtain unfair competitive advantage over law-abiding employers).

<sup>107</sup> See, for example, Michael Fix, Toward an Uncertain Future: The Repeal or Reform of Sanctions in the 1990s, in Fix, ed, The Paper Curtain at 303, 318–19 (cited in note 29) ("in markets where law-abiding and law-evading firms compete with one another, the latter may come to enjoy an increased cost advantage").

would simply bear the risk of any sanctions enforcement action, while supplying a labor force of undocumented workers that the large employer was free to exploit.<sup>108</sup>

In the years since IRCA, reliance on labor contractors, sub-contractors, and contingent workers of various kinds has expanded significantly, not only in the agricultural sector, but in many other price-competitive, labor-intensive sectors, from building services to construction to retail sales to computer programming. The logic is easy to understand. Large employers seek to insulate themselves from IRCA liability while reaping the cost-savings of using undocumented workers, who face greater practical and legal impediments to forming unions or enforcing over-time rules, health and safety regulations, and anti-discrimination requirements than do U.S. workers. 110

In the resulting race to the bottom, law-abiding employers must hire undocumented workers, often indirectly through subcontractors, or else suffer the consequences of unfair competition with outlaw firms that hire and exploit undocumented workers. The *Hoffman* decision has intensified this dynamic, making it absolutely clear that employers of undocumented workers are in many instances immune from ordinary labor law liability. Thus the demand for undocumented workers continues, while the workers themselves now find employment opportunities concentrated with sweatshop employers or shadowy subcontractors whose entire raison d'être is to insulate mainstream firms from IRCA liability.

#### III. A DIFFERENT WAY

Not one immigration-reform proposal offered by the Bush Administration, Congress, or outside advocates presently con-

214

<sup>108</sup> Id at 318.

<sup>109</sup> Consider Catherine Ruckelshaus and Bruce Goldstein, From Orchards to the Internet: Confronting Contingent Worker Abuse (National Employment Law Project 2002), available at <a href="http://www.nelp.org/docUploads/pub120.pdf">http://www.nelp.org/docUploads/pub120.pdf</a> (last visited Feb 9, 2007); Jennifer Gordon, Suburban Sweatshops: The Fight for Immigrant Rights (Belknap 2005).

<sup>110</sup> See, for example, Greg Schneider, Grand Jury, Wal-Mart Probe Hiring of Workers; Investigation Focuses on What Executives Knew, Wash Post E01 (Oct 25, 2003) (describing grand jury allegations that "Wal-Mart Stores Inc. executives knowingly hired cleaning-crew contractors that employed illegal immigrants" and noting "one of the ways some businesses hold down labor costs is to fill low-rung jobs—such as custodial positions—with undocumented immigrants, who are afraid to stand up for better wages"); Commercial Cleaning Services, LLC v Colin Serv Sys, 271 F3d 374 (2d Cir 2001) (holding an allegation by a cleaning service that a competitor hired undocumented workers to underbid competing firms states a claim under RICO).

templates repealing employer sanctions, and nearly all would increase penalties for sanctions violations, increase resources dedicated to sanctions enforcement, improve online document verification systems, or all of the above. This makes no sense. The policy rationale for sanctions has proved mistaken, and there is now a labor/management/Latino/civil rights political consensus opposed to sanctions. As feared, sanctions have caused employment discrimination, unfair competition, and dramatic erosions of the labor rights of immigrants, while conferring a broad coercive power on employers, without deterring illegal immigration. Together this has almost certainly contributed to the depression of wages and working conditions for U.S. workers.

As it turns out, however, the worst feature of IRCA was neither the widespread discrimination feared by civil rights opponents nor the creation of onerous paperwork requirements and corporate liability dreaded by business opponents. Rather, IRCA's most pernicious consequence has been to strengthen the coercive power exercised by exploitative employers over noncitizens in the workplace, overwhelming any disincentive based on the risk of civil penalty and making employment of undocumented workers irresistible in low-wage, labor-intensive industries.

First, IRCA has made private employers the instrument of immigration enforcement. Employers are empowered to, and by law must, inquire into the immigration status of their employees. If immigrant workers seek to form a union, demand overtime pay, resist sexual harassment, or otherwise defend their interests in the workplace, employers often insist on "reverifying" their documents<sup>113</sup> or, more aggressively, request an immigration raid to target activist workers.<sup>114</sup>

<sup>&</sup>lt;sup>111</sup> See notes 18-21 (describing Bush proposal, House bill, Senate bill, Kennedy-McCain, Cornyn-Kyl, Tancredo, Jackson-Lee, and MPI Task Force proposals).

<sup>112</sup> See Bach and Meissner, Employment and Immigration Reform at 291 (cited in note 53) (acknowledging uncertainty about impact of sanctions but speculating sanctions "may have slowed rate of increase of the flow" of illegal immigration).

<sup>&</sup>lt;sup>113</sup> See Annie Decker, Comment, Suspending Employers' Immigration-Related Duties During Labor Disputes: A Statutory Proposal, 115 Yale L J 2193, 2195 (2006) (arguing for legislative reform to prohibit re-verification during labor dispute).

<sup>114</sup> See, for example, *Montero v INS*, 124 F 3d 381, 382 (2d Cir 1997) (employer, in response to union organizing campaign, threatened to contact INS and, through its counsel, a former INS official, did contact INS to request raid of its own employees); *In re Herrera-Priego*, USDOJ EOIR (Lamb, IJ, July 10, 2003) (describing employer's retaliatory call to INS to request raid of own factory to punish workers who have filed overtime complaints with state labor agency), available at <a href="http://www.lexisnexis.com/practiceareas/immigration/pdfs/web428.pdf">http://www.lexisnexis.com/practiceareas/immigration/pdfs/web428.pdf</a> (last visited Feb 9, 2007).

Second, after *Hoffman*, employers are now *de jure* exempt from ordinary labor liability in many circumstances (previously, employers were at best *de facto* exempt, in light of the reluctance of some undocumented workers to file labor complaints). Even legislative proposals to "fix" *Hoffman* by restoring immigrant eligibility for backpay under labor and employment laws are inadequate, <sup>115</sup> because so long as immigration law forbids the employment of unauthorized immigrants, the traditional makewhole remedy of reinstatement will be unavailable.

Third, despite the negligible risk of a money penalty on employers who violate IRCA, sanctions have spurred an increasing reliance on subcontracted labor, beyond the agricultural sector where the practice first developed, thereby concentrating undocumented workers in underground cash economies and unregulated industries.

The coercive power of sanctions enables employers to claim a frighteningly sweeping control of the work-life of immigrants. Because of IRCA, a law-breaking employer may invoke the formidable powers of the government's law enforcement apparatus to terrorize its workers and suppress worker dissent under threat of deportation. In this sense, sanctions recall in some respects the post-Civil War schemes of peonage and debt bondage, in which private landowners invoked the power of the state to enforce discriminatory and unconscionable labor agreements that perpetuated the enslavement of African-Americans after Emancipation. Indeed, some courts have even recognized that an employer who threatens deportation to control its workforce may be violating the Thirteenth Amendment's prohibition on involuntary servitude, 116 a prohibition that an earlier generation of labor advocates once invoked as the theoretical and rhetorical foundation for the union movement itself.117

<sup>&</sup>lt;sup>115</sup> See, for instance, Safe, Orderly, Legal Visas and Enforcement (SOLVE) Act of 2004, S 2381 (introduced May 2004), HR 4262 (introduced May 2004) sec 321 (backpay remedy, but not reinstatement, restored for undocumented immigrants).

<sup>116</sup> See United States v Kozminski, 487 US 931, 948 (1988) ("it is possible that threatening... an immigrant with deportation could constitute the threat of legal coercion that induces involuntary servitude"); Majlinger v Cassino Contracting Corp, 802 NYS 2d 56, 64 (App Div 2d Dept Sept 19, 2005) (concluding that to deny recovery under state law for undocumented worker injured in course of employment "may even implicate the constitutional prohibition of involuntary servitude").

<sup>&</sup>lt;sup>117</sup> See James G. Pope, The Thirteenth Amendment Versus the Commerce Clause: Labor and the Shaping of American Constitutional Law, 1921–1957, 102 Colum L Rev 1 (2002).

The remedy is to repeal sanctions and restore mainstream labor protections to all covered employees, including reinstatement, regardless of the immigration status of the employee. While the proposal may seem counterintuitive, eliminating employers' terrible coercive power over undocumented immigrants would immediately diminish the incentive to prefer undocumented immigrants over U.S. workers. It would allow undocumented workers to defend their workplace interests far more effectively, whether by joining unions or reporting labor violations to appropriate agencies—thereby raising rather than lowering terms and conditions for all workers. Mainstream firms would dispense with the shadowy subcontractors and labor contractors. The original concerns with sanctions—increased discrimination and burdensome paperwork for firms-would be ameliorated. Finally, federal immigration authorities would have greater resources to devote to their genuine enforcement priorities. 118 And because the repeal of sanctions would deprive employers of their principal power over undocumented workers, employers would at long last have fewer incentives to prefer undocumented workers; the "jobs magnet" against which Congress sought to legislate in 1986 will be weakened, and there will be less illegal immigration.

The prohibition on employment of unauthorized immigrants may have endured largely because of its symbolic value<sup>119</sup> and because it has offered political protection for officials seeking to reform immigration laws in other ways.<sup>120</sup> But the sanctions law has neither protected U.S. workers nor deterred illegal immigration. Instead, the sanctions law has undermined both purposes. It is time to take a new path.

<sup>118</sup> As Secretary of Homeland Security Michael Chertoff recently observed on CNN, "Right now, I have got my Border Patrol agents and my immigration agents chasing maids and landscapers. I want them to focus on drug dealers and terrorists," available at <a href="http://transcripts.cnn.com/TRANSCRIPTS/0705/17/pzn.01.html">http://transcripts.cnn.com/TRANSCRIPTS/0705/17/pzn.01.html</a> (last visited July 2, 2007).

<sup>119</sup> See, for example, Peter Schuck, *The Great Immigration Debate*, Am Prospect (Sept 21, 1990), available at <a href="http://www.prospect.org/web/page.ww?section=root&name=ViewPrint&articleId=5313">http://www.prospect.org/web/page.ww?section=root&name=ViewPrint&articleId=5313</a> (last visited Feb 9, 2007) (discussing symbolic power of sanctions because "[i]mmigration threatens Americans' sense of control by seeming to jeopardize three fundamental values: national autonomy, economic security, and the 'social contract' that secures the welfare state").

<sup>120</sup> Fix, Toward an Uncertain Future at 323 (cited in note 107) (noting sanctions may supply "political 'cover' for liberalizing our immigration laws").



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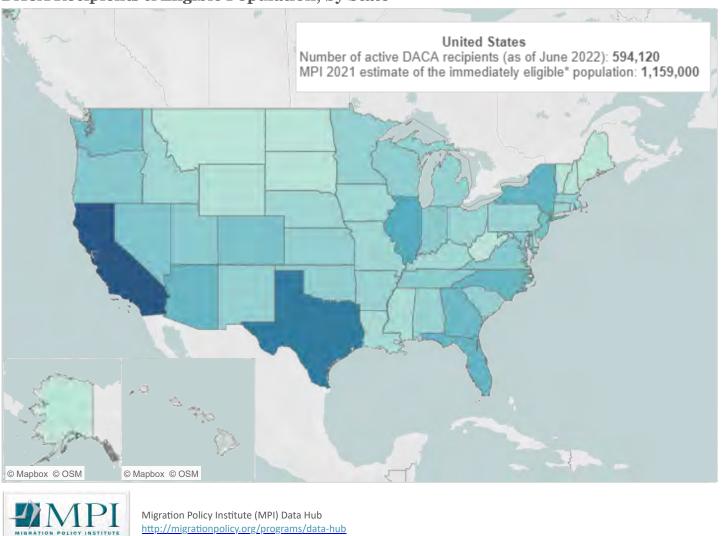
Home > Deferred Action for Childhood Arrivals (DACA) Data Tools

# Deferred Action for Childhood Arrivals (DACA) Data Tools

Learn about participation in the Deferred Action for Childhood Arrivals (DACA) program nationally and by state, as well as by top countries of origin. The two data tools offered here provide U.S. Citizenship and Immigration Services (USCIS) data on active DACA recipients at U.S. and state levels as of June 30, 2022, as well as the Migration Policy Institute's 2021 estimates of individuals eligible to participate based on the criteria outlined at the program's launch in 2012. MPI offers its estimates to permit comparison of current DACA recipients against the number that ever could have applied under the program's original rules.

The first tool offers the number of active DACA recipients and MPI estimates at U.S. and state levels of individuals meeting all criteria to apply, whether or not they ever did. The second tool offers data for top countries of origin. Hover over a state or country to see the data.

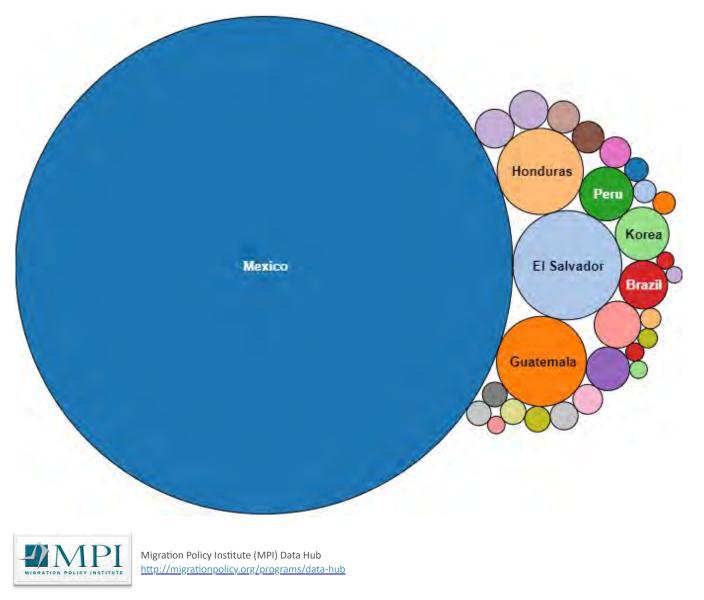
# DACA Recipients & Eligible Population, by State\*



\* Estimates refer to the individuals who could have become eligible for DACA under the program's original 2012 rules.

For notes and sources, please see below second data tool.

# DACA Recipients & Eligible Population, by Country of Origin\*



\* Estimates refer to the individuals who could have become eligible for DACA under the program's original 2012 rules.

# Notes:

Migration Policy Institute (MPI) estimates of the DACA-eligible population as of 2021 include unauthorized immigrant youth who had been in the United States since 2007, were under the age of 16 at the time of arrival, and were under the age of 31 as of 2012. Three populations are estimated: (1) Immediately eligible youth and adults who met both age and educational criteria (i.e., they were ages 15 to 39 as of December 2021 and were either enrolled in school or had at least a high school diploma or equivalent); (2) youth and adults who were eligible but for education (i.e., those ages 15 to 39 as of December 2021 who met the other requirements but did not have a high school diploma or equivalent and were not enrolled in school); and (3) children eligible in the future who met the age-at-arrival requirements but were ages 9 to 14 in December 2021, and would become eligible when they reach age 15 provided they stay in school. For the immediately eligible population, the MPI estimates capture those meeting the criteria to apply for DACA, whether or not they ever did. As a result, past and current DACA recipients would be included within the MPI estimates. To capture the population eligible to apply in 2021 using 2019 data,

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MPI included in its estimates youth who would have turned age 15 through December 2021. Using the share of the DACA-eligible population ages 19 to 24 without a GED or high school diploma and not enrolled in school in 2019, MPI excluded a portion of the immediately eligible 17- and 18-year-olds in 2021 to account for potential school dropouts as this population ages. Eligibility due to adult-education program enrollment and ineligibility due to criminal history or lack of continuous U.S. presence were not modeled due to lack of ability to do so using Census data.

The 30 national-origin groups included in the tool are countries with at least 500 active DACA participants as of June 30, 2022.

# Sources:

MPI analysis of U.S. Census Bureau data from the 2019 American Community Survey (ACS) and the 2008 Survey of Income and Program Participation (SIPP), drawing on a methodology developed in consultation with James Bachmeier of Temple University and Jennifer Van Hook of The Pennsylvania State University, Population Research Institute; U.S. Citizenship and Immigration Services (USCIS), "Count of Active DACA Recipients by Month of Current DACA Expiration as of June 30, 2022," <a href="https://www.uscis.gov/sites/default/files/document/data/Active\_DACA\_Recipients\_June\_30\_2022.pdf">https://www.uscis.gov/sites/default/files/document/data/Active\_DACA\_Recipients\_June\_30\_2022.pdf</a>.

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# ARTICLE



# Neighborhood immigrant concentration and violent crime reporting to the police: A multilevel analysis of data from the National Crime Victimization Survey\*

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# Abstract

Using data from the Area-Identified National Crime Victimization Survey (NCVS), we provide a national assessment of the impact of neighborhood immigrant concentration on whether violence is reported to the police. By drawing on multiple theoretical perspectives, we outline how the level of violence reporting could be higher or lower in immigrant neighborhoods, as well as how this may depend on individual race/ethnicity and the history of immigration in the county in which immigrant neighborhoods are located. Controlling for both individualand neighborhood-level conditions, our findings indicate that within traditional immigrant counties, rates of violence reporting in immigrant neighborhoods are similar to those observed elsewhere. In contrast, within newer immigrant destinations, we observe much lower rates of violence reporting in neighborhoods with a large concentration of immigrants. Our study findings reveal comparable patterns for Whites, Blacks, and Latinos. The results have important implications for theory, policy, and future research.

# KEYWORDS

crime reporting, immigration, National Crime Victimization Survey (NCVS), police, race/ethnicity

Immigration has long been a politically charged social issue in America (e.g., Portes & Rumbaut, 2014; Sellin, 1938; Tichenor, 2002). It reemerged as an area of intense contestation after the 1996 immigration reform and the attacks of September 11, 2001 (Kubrin, Zatz, & Martinez, 2012; Pierotte, Xie, &

Baumer, 2018; Varsanyi, Lewis, Provine, & Decker, 2012). As in the previous century (Bennet, 1909; Kelsey, 1926), politicians have frequently linked immigration to crime during the contemporary era (for reviews, see MacDonald & Sampson, 2012; Tonry, 1997; Zatz & Smith, 2012). Indeed, references to crime and public safety have become a common refrain in recent calls for more restrictive immigration policies in the United States, supported by repeated claims about higher levels of crime in immigrant communities (e.g., Barrett, 2017; Rosenberg & Levinson, 2017).

Notwithstanding the rhetoric on immigration, in a timely and important systematic review of the available empirical evidence, Ousey and Kubrin (2018) contradicted claims that crime is more prevalent in immigrant communities. After reviewing more than 50 studies published between 1994 and 2014, they concluded that the available scientific evidence reveals a small but noteworthy negative association between community immigrant concentration and crime rates. In other words, the accumulated empirical evidence runs counter to contemporary political rhetoric. Nonetheless, as Ousey and Kubrin (2018) acknowledged, a large portion of the existing research is based on official crime data from the police that have important limitations. A key data limitation of many of these studies the possibility of significant underreporting of crime in immigrant communities—is directly relevant to the fundamental question of whether crime rates vary systematically with community immigrant concentration. As Ousey and Kubrin (2018) noted, if the rate of reporting to the police is suppressed in immigrant areas, using police-based crime data could yield misleading conclusions about community differences in immigration and crime (also see the discussion by Davies & Fagan, 2012; Zatz & Smith, 2012). Moreover, the underreporting of crime in immigrant communities would raise serious concerns for social justice and the equitable delivery of victim support services to those who are in need (Davis & Erez, 1998). The formal social control function of the criminal justice system may be compromised in communities as well when crimes are not reported to the police (Gottfredson & Gottfredson, 1988).

The potential underreporting of crime in immigrant neighborhoods is an important consideration, but limited empirical research exists on this matter. Furthermore, as described in detail later in this article, in the relevant theoretical literature, scholars have pointed to a complex (and not necessarily inverse) relationship between neighborhood immigrant concentration and the likelihood of crime reporting that warrants empirical investigation. We advance research on immigration and crime by evaluating whether residents of immigrant neighborhoods are less likely to report crimes to the police when victimized. The theoretical framework that we present integrates insights from the literatures of place stratification, legal cynicism, neighborhood social capital, perceived group threat, and segmented immigrant incorporation. This framework guides our assessment of whether victims in immigrant neighborhoods are less likely to notify the police, and whether this relationship is contingent on the racial—ethnic background of victims and the local immigration history of the county in which the neighborhoods are located. We explore these issues using a restricted-use version of the U.S. National Crime Victimization Survey (NCVS). The analysis is timely, and the results demonstrate the influence of neighborhood immigrant concentration on the likelihood of reporting crime for a pivotal period in the trajectory of immigration to the United States (1996–2014).

The article includes the following sections. In the first section, we describe the empirical context and theoretical background relevant to the potential impact of neighborhood immigrant concentration on levels of crime reporting. We highlight in this section the nuances and ambiguities in the theoretical works to contrast competing hypotheses. In the next section, we outline the implications of the geographic expansion of immigrant settlement to newer immigrant-receiving areas in the United States

<sup>&</sup>lt;sup>1</sup> In the 1990s, the United States saw the largest increase in immigrants in decades since 1965, and in 1996, Congress passed the Illegal Immigration Reform and Immigrant Responsibility Act that was widely seen as unfriendly toward immigration and a major overhaul of the U.S. immigration law (Fragomen, 1997).



since the 1990s for the expected effects of neighborhood immigrant concentration on crime reporting levels. We then present data and methods and, in the next section, describe the results. In the last section, we discuss the implications of the findings and make recommendations for future research.

# 1 | RESEARCH BACKGROUND

# 1.1 | Limited empirical work in the immigration and crime reporting literature

In the United States, many crimes-often more than half-are not reported to the police (Truman & Morgan, 2016). The underreporting of crimes has been attributed to a wide range of factors such as the seriousness of crimes (e.g., Gottfredson & Hindelang, 1979; Skogan, 1984), the characteristics of victims and offenders (e.g., Bachman, 1998; Gartner & Macmillan, 1995; Lizotte, 1985; Pino & Meier, 1999), and the social and legal environments that regulate the responses of victims to crimes (e.g., Baumer, Felson, & Messner, 2003; Spohn & Horney, 1992; Xie & Lauritsen, 2012). Of these explanations, crime severity and individual differences are the focus of most empirical research. Less often considered-although it is a frequent topic of conversation among researchers and policy makersis how community conditions, including the concentration of immigrants, influence the likelihood of crime reporting (Baumer, 2002; Gutierrez & Kirk, 2017). This lack of research is, at least in part, because data for community identifiers are usually not available in publicly accessible data sets on crime reporting levels (see discussion by Baumer, 2002).

Absent direct scientific evidence, the presumption based on anecdotal evidence is usually that crime in immigrant communities is much less likely to be reported to the police than crime elsewhere (e.g., Bever, 2017; Queally, 2017). Some scholars have echoed this sentiment in their commentaries, noting that police-community relations may be strained in immigrant neighborhoods because of stringent immigration legislation that has fostered high levels of mistrust and legal cynicism that discourage reporting (e.g., Davis & Henderson, 2003; Skogan, 2009; Zatz & Smith, 2012). As Zatz and Smith (2012, p. 147) put it, the contemporary political landscape in the United States may make "immigrants, and other members of their communities, afraid to call on the police" (see also Carr, Napolitano, & Keating, 2007).

Although the anecdotal evidence for lower rates of crime reporting in immigrant communities is persuasive, systematic scientific evidence is difficult to locate. Scholars have considered immigrants' perceptions of crime and of police authorities (see reviews by Menjívar & Bejarano, 2004; Peck, 2015), but there have been very few direct assessments of whether residents of immigrant neighborhoods do, as the anecdotal evidence indicates, exhibit reluctance to seek police assistance when they are victimized. In a handful of studies that have been aimed at doing so, researchers have relied on data from a narrow range of cities (such as New York City and Chicago) using observations from a small sample of neighborhoods (e.g., Davis & Henderson, 2003). Alternatively, a few efforts have been designed to compare levels of victim reporting across major cities or metropolitan areas, where the scope of investigation was limited to city-wide (or metropolitan-wide) measures of immigrant concentration that do not reflect neighborhood variation (Gutierrez & Kirk, 2017; Schnebly, 2008). Although valuable, these earlier efforts represent a narrow assessment of neighborhood effects that should be expanded to encompass a wider theoretical scope, as we elaborate in this article.

# 1.2 | Theoretical arguments

Several competing perspectives-place stratification, legal cynicism, neighborhood social capital, and perceived group threat—are useful in understanding crime reporting rates related to immigrant concentration. These different perspectives emphasize unique circumstances, needs, challenges, or opportunities that residents of immigrant neighborhoods experience when attempting to deal with crime and interacting with the police. Collectively, these perspectives suggest a more nuanced set of expectations than is reflected in most discussions of immigrant concentration and crime reporting levels. In particular, whereas some perspectives support the conventional wisdom that living in an immigrant neighborhood may lessen the likelihood of crime reporting, others imply that it may promote higher rates of crime reporting. Additionally, these perspectives suggest some important features of the relationship that have been overlooked in past research. These include the possibility of 1) nonlinear threshold effects of neighborhood immigrant concentration on crime reporting levels and 2) moderating effects that are contingent on victims' ethnoracial identity and the context of immigration in which the neighborhoods are located. These insights guide our empirical assessment of the relationship between neighborhood immigrant concentration and the likelihood of crime reporting in the present study. Although we do not have data to assess the validity of the underlying theoretical mechanisms for the implied relationships, we outline these mechanisms to aid theoretical interpretation of the data.

# 1.2.1 | Crime reporting levels may be suppressed in immigrant communities

Theories of place stratification and legal cynicism enumerate the commonly cited reasons for concerns about differential underreporting by victims of crimes across neighborhoods. The social stratification of neighborhoods by factors such as race/ethnicity, socioeconomic status, and the concentration of immigrants is a phenomenon that has a long history in urban sociology. In the early twentieth century, Chicago School theorists observed that concentrated immigrant settlement facilitated access to family and cultural ties, affordable housing, and gainful employment for new arrivals (e.g., Burgess, 1925; Thomas & Znaniecki, 1918). Over time, neighborhoods of immigrant settlement may develop distinct physical, social, and economic characteristics. In so doing, the concentration of immigrants may become a key neighborhood stratification factor that reflects the choices and constraints that residents face in their daily routines, including dealing with crime and the police (Conzen, 1979; Kubrin & Ishizawa, 2012; Menjívar & Bejarano, 2004).

Because of neighborhood differences in language use, preexisting legal beliefs, concentrated disadvantage, and residents' experiences with legal authorities that are interpreted as unfair and unjust, neighborhoods of high immigrant concentration may develop high levels of legal cynicism. Researchers of legal cynicism suggest that this may affect crime reporting levels because victims in such areas may avoid calling the police as a result of a strong collective sentiment in the neighborhood that defines the law and police as untrustworthy and uncaring (Anderson, 1999; Bennett & Wiegand, 1994; Kirk & Matsuda, 2011). Some of the neighborhood sentiment may be attributable to residents' preexisting legal beliefs; that is, although immigrants to the United States tend to be more law-abiding than their native-born counterparts (Tonry, 1997), they may be predisposed to distrust legal authorities because of experiences with inefficient or corrupt law enforcement in their home countries (Pogrebin & Poole, 1990). Additionally, even without such preexisting beliefs, many scholars have suggested that the contemporary political and legal reactions to immigration in the United States (such as the use of the Criminal Alien Program, 287g program, Secure Communities, and the National Fugitive Operations Program) have fostered high levels of police mistrust in many immigrant neighborhoods (e.g., Davies & Fagan, 2012; Davis & Henderson, 2003; Rengifo & Fratello, 2015). This mistrust, coupled with language and cultural barriers such as lack of knowledge of the American criminal justice system, may make the neighborhood more susceptible to widespread legal cynicism (Bauer, 2009; Davis & Erez, 1998; Zatz & Smith, 2012).

Empirically, some scholars have questioned the idea that legal cynicism is prevalent in immigrant communities and that residents of such areas are less willing to cooperate with the police (e.g., Correia,

2010; Davis & Hendricks, 2007). For example, Kirk, Papachristos, Fagan, and Tyler (2012) found in a survey of New York City residents that those residing in neighborhoods with higher immigrant concentration expressed less legal cynicism and a greater likelihood of cooperating with the police, at least in communities with homogenous immigrant populations. Nevertheless, in a considerable body of research comprising qualitative and quantitative methodologies, scholars have documented troubled relations between the police and residents of immigrant communities (e.g., Carter, 1985; Menjívar & Bejarano, 2004; Sampson & Bartusch, 1998). In these studies, the investigation often centers on racial/ethnic minorities as immigrants arriving in the post-1965 period have been increasingly identified with racial/ethnic minority group status. Such studies include, for example, Menjívar and Bejarano's (2004) interviews of Latino immigrants in disadvantaged neighborhoods in Phoenix, Arizona, and Rengifo and Fratello's (2015) interviews of primarily Black and Latino immigrants in New York City. There is much less information on White residents in immigrant neighborhoods (whether they themselves are immigrants or not), but one may assume that White residents are not immune to legal cynicism in their communities even if they may be less likely than minority residents to hold negative views of the police (e.g., Brunson, 2007; Brunson & Miller, 2006; Stewart, Baumer, Brunson, & Simons, 2009; Weitzer & Tuch, 2005).

The foregoing discussion on place stratification and legal cynicism indicates that when immigrants become concentrated in a neighborhood, victim crime reporting levels may be suppressed significantly. Empirically, we interpret these arguments as implying a nonlinear relationship, with the effect of neighborhood immigrant concentration on crime reporting rates emerging or increasing under conditions of high immigrant concentration. That is, although many empirical assessments of the neighborhood conditions that yield legal cynicism have emphasized linear associations (e.g., Kirk & Papachristos, 2011; Sampson & Bartush, 1998), the logic of the underlying theoretical arguments is that selected neighborhood conditions, including socioeconomic conditions and immigrant composition, are expected to foster legal cynicism primarily when they reach high or extreme levels (e.g., Anderson, 1999; Baumer, 2002; Kirk et al., 2012). Most neighborhoods in the United States contain a small percentage of foreign-born residents, and it seems unlikely that a change in the share of foreign born at low levels would yield the implied shifts in community-wide levels of legal cynicism. In contrast, when immigrants reach a large proportion of the neighborhood population, a variety of community-wide externalities may be more likely to emerge. Browning, Dirlam, and Boettner (2016) documented such a nonlinear effect of community immigrant concentration on levels of collective efficacy, and we suggest that a similar pattern may exist for legal cynicism. Thus, as shown in the summary of hypotheses in table 1, on the basis of the legal cynicism framework, we anticipate a negative association between the percentage of neighborhood residents who are foreign born and the likelihood of crime reporting by victims of crime that strengthens, and perhaps only emerges, at high levels of percent foreign born (H1).

In testing this hypothesis, we also assess whether the anticipated relationship in H1 depends on the race and ethnicity of victims. This is an important extension of the assessment, and the specific prediction is ambiguous. On the one hand, as suggested, the relationship could be racially/ethnically invariant if all residents are indiscriminately exposed to and affected by neighborhood-wide legal cynicism, yielding a reduced likelihood of reporting in neighborhoods with heavy immigrant concentration among all residents, irrespective of race or ethnicity (H1a). On the other hand, researchers have documented racial and ethnic stratification in legal cynicism, reporting evidence that Latinos and Blacks are more likely than Whites to harbor such feelings (Kirk & Papachristos, 2011; Vélez, Lyons, & Santoro, 2015). Within immigrant neighborhoods, we would expect Latinos to be especially vulnerable to immigration-related legal cynicism as they are at the center of the current immigration debate (Varsanyi

TABLE 1 Summary of theoretical predictions

Theoretical Predictions about the Relationship Between Immigration	ant
Concentration and Crime Reporting Behavior	

Theoretical Roots	Likelihood of Reporting in Immigrant Neighborhoods	Ethnoracial Invariance or Variation	Destination Type as Moderator
Place stratification; neighborhood legal cynicism	H1: Lesser; nonlinear	H1a: All racial/ethnic groups	Stronger in newer destinations
		H1b: Especially marked for Latinos and, to a lesser extent, Blacks	Stronger in newer destinations
Neighborhood social capital; immigrant revitalization	H2: Greater; nonlinear	H2a: All racial/ethnic groups	Stronger in traditional destinations
Perceived immigrant threat	H2: Greater; nonlinear	H2b: Limited to Whites	Stronger in newer destinations

et al., 2012). Blacks are less tied to immigration, but because of their minority group status, they may also be more likely than Whites to experience and recognize exclusionary practices and policies in their neighborhoods (Brunson & Miller, 2005; Fussell, 2014). Thus, if such differences are to be reflected in victims' crime reporting behaviors, then the anticipated reduced likelihood of crime reporting in immigrant neighborhoods may be especially marked for Latinos and, to a lesser extent, Blacks (H1b).

# 1.2.2 | Crime reporting levels may be enhanced in immigrant neighborhoods

Although accounts of crime underreporting in immigrant neighborhoods dominate media headlines, some theoretical perspectives provide counterarguments to such assertions. These include theories that emphasize the impact of immigration on neighborhood social capital and on perceived immigrant threat.

Neighborhood social capital is a theoretically important aspect of neighborhood resources that may help reduce crime and encourage the likelihood of crime reporting. Specifically, in studies of immigration and neighborhood revitalization, scholars have posited that higher levels of immigrant concentration may generate direct economic and social benefits to neighborhoods by enhancing neighborhood organization, or collective efficacy, via the strengthening of local institutions, resident ties, social trust, and community engagement (see, e.g., Martinez, 2002; Ousey & Kubrin, 2009). These enhancements have potential crime-reducing benefits (Sampson, 2008), and they may promote the development of stronger ties between residents and government agencies, including the police (e.g., Bursik & Grasmick, 1993; Vélez, 2001). Baumer (2002) integrated these themes to argue that persons who experience or witness crimes in neighborhoods with higher levels of social cohesion and collective efficacy may be more likely than others to notify the police, a prediction with some empirical support (Goudriaan, Wittebrood, & Niewbeerta, 2006). Thus, to the extent that a larger concentration of immigrants bolsters community social organization, it may yield higher rates of police notification as well. This prediction would support Kirk et al.'s (2012) finding from New York City, as we noted earlier, that

<sup>&</sup>lt;sup>2</sup> Foreign-born Latinos, and Mexican nationals in particular, are the primary focus in American immigration debates such as the Deferred Action for Childhood Arrivals (DACA) program. The NCVS does not allow the evaluation of Latinos by nationality. We address data limitations in the Discussion section,

residents of neighborhoods with higher levels of immigrant concentration were more inclined to say that they would call the police to report crimes and to cooperate with police on resulting investigations.

The social threat perspective also implies a potential positive relationship between percent foreign born and victim crime reporting rates, but for a different reason. It points to the intergroup conflict between immigrants and the native population that has been documented in the United States (Fussell, 2014). To the native population, the findings from prior studies have revealed that the U.S. political and media discourse constructs immigrants and immigrant neighborhoods as threatening to public safety and to broader economic, political, and cultural interests (Brader, Valentino, & Suhay, 2008; Chavez, 2008; Chiricos, McEntire, & Gertz, 2001; Eitle & Taylor, 2008; Kent & Jacobs, 2005; Wang, 2012). Scholars have long drawn general links between perceived social threats and the use of formal social control efforts, including the reporting of crimes to the police (Blalock, 1967; King & Wheelock, 2007; Stults & Baumer, 2007; Warner, 1992). In drawing on these ideas, scholars have recently suggested that punitive sentiment and the mobilization of law may be especially prominent in communities in which immigrants compose a larger and growing share (Johnson, Stewart, Pickett, & Gertz, 2011; Stewart, Martinez, Baumer, & Gertz, 2015; Stupi, Chiricos, & Gertz, 2016).

For both social capital and immigrant threat perspectives, the logic of these arguments indicates that the positive relationship that they posit between percent foreign born and the likelihood of victim crime reporting is unlikely to take a linear form. Instead, like the expected impact of legal cynicism, the implied theoretical mechanisms may be activated only when immigrants comprise a large share of the population. As summarized in table 1, it suggests a positive association between the percentage of neighborhood residents who are foreign born and the likelihood of crime reporting by victims of crime that strengthens, and perhaps only emerges, at high levels of percent foreign born (H2).

Consistent with the logic of H2, the anticipated nonlinear relationship between minority population composition and the mobilization of law has been long recognized in the social threat literature (Blalock, 1967; Liska, 1992; Stults & Baumer, 2007). Blalock (1967) argued that minority groups would generate little concern when their share of the population was small. Minority groups may become viewed as threatening to majority interests as they become more populous and begin to compete for political power (Blalock, 1967). Although much of the findings reported in the literature have revealed a perceived threat of Blacks, several studies have been aimed at extending this research to ethnic minorities and immigrants (Stein, Post, & Rinden, 2000; Taylor, 1998). More recently, Newman, Hartman, and Taber (2012) suggested that perceived threat among natives might be especially salient in communities with large immigrant populations because it is in these areas that threatening group dissimilarities will be most noticeable. In drawing insights from this work, we anticipate that immigration may not enhance crime reporting levels until the size of the immigrant population becomes large, when immigrants are more likely to be perceived as threatening. The parallel nonlinear relationship anticipated by theories of social capital is less recognized, but the underlying logic has been effectively articulated by Browning et al. (2016). As they argued, the community-wide anticipated gains in collective efficacy that may accrue from immigration should be limited to communities in which immigrants reach a large share of the population, where strong social networks and social support are sufficient to counter the potential disrupting influences of heterogeneity. Browning et al. (2016) found support for this idea in Los Angeles and Chicago, where growth in the percent foreign born beyond approximately 40-50 percent yielded significant increases in the levels of collective efficacy. This pattern represents another reason that percent foreign born may exhibit an accelerating positive association with victim crime reporting rates.

Although theories of social capital and immigrant threat both predict a positive relationship between percent foreign born and the likelihood of victim crime reporting, the implications of their arguments diverge with respect to ethnoracial variation. As Sampson (2008) argued, theories of immigrant

revitalization, including those that emphasize increases in social cohesion, imply that immigrant concentration provides community-wide externalities that benefit all neighborhood residents. Based on this reasoning, the expected positive accelerating relationship between percent foreign born and the likelihood of crime reporting by victims of crime should extend to all racial/ethnic groups, including Latinos, Blacks, and Whites (H2a).

In contrast, the threat perspective on police notification (see also Warner, 1992) implies that the association between neighborhood immigrant concentration and the likelihood of crime reporting may be stratified by the racial and ethnic background of individuals. That is, because of differences in cultural background, political orientation, structural position, and group exposure, Whites may be especially likely to perceive immigrants as threatening, with Blacks much less likely to harbor such feelings and Latinos mostly immune to them (Berg, 2009; Burns & Gimpel, 2000; Massey, 1995). Thus, the expected positive accelerating relationship between percent foreign born and the likelihood of crime reporting by victims of crime may be limited to Whites (H2b).

#### 1.2.3 | Potential moderating role of the immigrant reception context

Before we assess the hypotheses outlined, we must discuss an additional factor that is relevant to our study: the historical immigration context of the broader areas in which contemporary immigrant neighborhoods are located. As immigrants to the United States have become more geographically dispersed into newer destinations (Massey, 2008), scholars increasingly have emphasized the potentially powerful moderating role of the broader immigration reception context for a variety of outcomes, including crime and policing (Lyons, Vélez, & Santoro, 2013; Zatz & Smith, 2012). We anticipate that the immigration history of the larger social context in which neighborhoods are located will similarly condition the impact of neighborhood immigrant concentration on victim crime reporting levels.

From the 1965 Immigration Act to the 1980s, a small number of states (New York, California, Florida, Texas, Illinois, and New Jersey) and just a few cities (New York City, Los Angeles, Miami, Houston, and Chicago) were the most favored immigrant destinations (Massey & Capoferro, 2008). Their importance waned in the 1990s, however, after the amnesty program of the 1986 Immigration Reform and Control Act, the economic recession in California and Texas, and the economic boom in the South and Mountain regions (Parrado & Kandel, 2008; Zúñiga & Hernández-León, 2005). From 1990 to 2015, immigrants grew from 5.4 million to 15.8 million in states outside the traditional gateway states, most markedly in the Southeast, Midwest, and Mountain West. The traditional areas tend to have higher levels of economic, social, organizational, and political resources to facilitate the incorporation of immigrants. In New York City, for example, innovative programs serving immigrants include cultural sensitivity training, community outreach programs, and multilingual assistance or translators in police agencies (Davis & Erez, 1998). Immigrant communities in these traditional gateways, as some scholars have observed, can be functionally integrated into the mainstream economic and political systems, thereby allowing them to build intergroup coalitions to advance shared interests among all groups (Jones-Correa, 2001). Such functional relationships and features of social organization are less prominent in newer immigrant counties (Massey, 2008), which as table 1 shows, has implications for each empirical prediction outlined earlier.

First, county immigration history is likely to shape the degree to which legal cynicism emerges in immigrant neighborhoods. The expectation of greater legal cynicism associated with neighborhood

<sup>&</sup>lt;sup>3</sup> Material economic concerns and labor market competitions are also potential factors affecting anti-immigrant sentiment, but findings reported in empirical studies indicate that attitudes toward immigration are primarily influenced by noneconomic factors like cultural and political—ideological forces including ethnocentrism, nationalism, and political conservatism (Chandler & Tsai, 2001; Hainmueller & Hiscox, 2010) and by group contact factors (Ceobanu & Escandell, 2010).

immigrant concentration and the consequently reduced likelihood of reporting (H1, H1a, and H1b) may be countered in traditional destinations because of the longer time period over which trust between residents and police has had a chance to be built. Meanwhile, in newer destinations, where the foundation for such trust is more fragile and less well developed, the economic, social, and political support for immigrants is comparatively weak (Massey, 2008; Millard & Chapa, 2004; Oropesa & Jensen, 2010). Immigrant neighborhoods in such areas are less well integrated into the local political power structure, and the criminal justice system has limited programs and policies to assist immigrant victims (Lyons et al., 2013; Zatz & Smith, 2012). These conditions are conducive to legal cynicism. Therefore, the reduced likelihood of reporting as suggested by H1, H1a, and H1b may be more likely to emerge in newer destinations.

Second, because the foundations of immigrant incorporation and support are more fully developed in traditional destinations, the possibility that social capital will increase in high-immigrant neighborhoods, and that this in turn will increase crime reporting rates (H2 and H2a), should be much greater in traditional areas.

Third, inclinations to report crimes as a response to perceived immigrant threat (H2 and H2b) may be amplified in newer immigrant destinations. Compared with traditional destinations, residents in newer immigrant areas have had less time to negotiate and understand social and cultural differences brought by immigrants (Massey, 2008). Furthermore, immigrants tend to be more residentially, as well as socially, isolated from the native population within newer immigrant areas (Hall, 2013; Hall & Crowder, 2014). These conditions may foster exaggerated perceptions of threats (Stewart et al., 2015), yielding patterns in newer destinations that are more in keeping with H2 and H2b than is the case in traditional destinations.

#### 2 | DATA AND METHOD

#### 2.1 | Data

To address the research hypotheses, we used a geocoded version of the NCVS in which the census tracts and counties of respondents' residence for the period of 1996-2014 were identified.4 We conducted the research at the Census Bureau headquarters where the data are available to researchers granted clearance to access restricted information collected by the Census Bureau. The NCVS is the nation's primary source of information on criminal victimizations, especially for crimes not reported to the police (Lynch & Addington, 2007). The survey utilizes a stratified, multistage cluster design to identify a probability sample of residents aged 12 years and older. The large sample size (approximately 140,000 persons interviewed each year) and the survey's national geographic coverage enable a unique assessment of the impact of neighborhood immigrant concentration on levels of crime reporting across traditional and nontraditional destinations.

The area-identified NCVS contains 19,225 violent victimizations (prior to weighting), including rape, sexual assault, robbery, aggravated assault, and simple assault that occurred 5 miles or less from

<sup>4</sup> The NCVS had ~11 percent of respondents lacking census tract codes because they lived in areas or newly constructed houses for which tract codes were not assigned. As a sensitivity test, we examined data in 2005-2014 for which we used zip codes to assign tract codes using two different methods: 1) using the census tract with the largest number of residential addresses within a zip code, and 2) using the average characteristics of all census tracts within a zip code (zip codes were not available for data in earlier years). This alternative data set produced similar results.

victims' homes.<sup>5</sup> We used tract and county codes to link the victimization records with characteristics of communities measured by the American Community Survey (ACS), the Decennial Census, and other sources, as discussed in the next section.

#### 2.2 | Measures

#### 2.2.1 | Dependent variable

The dependent variable was a dichotomous measure of whether a violent crime was reported to the police (1 = yes, 0 = no). In the data, 48 percent of violent victimizations were reported to the police (see the descriptive statistics presented in appendix A). Most of these cases (73 percent) were reported to the police by victims (including household members), with the remainder reported by third parties. In a sensitivity analysis, we found that excluding incidents reported by third parties had little impact on results, so all incidents were included in the analysis.

#### 2.2.2 | Independent variables

Victim race/ethnicity

Of the incidents included in the study, 66 percent involved White victims (unweighted n = 13,065), 16 percent Black victims (unweighted n = 2,720), and 14 percent Latino victims (unweighted n = 2,595). Individuals of multiple races were coded as "other" race. Like other single-race groups, they were included in the overall sample (4 percent of incidents), but we did not conduct separate analyses for these groups because of the small sample size.

#### Neighborhood immigrant concentration

We used census tracts to approximate neighborhoods. Neighborhood immigrant concentration was measured by the percentage of tract population that was foreign born. To establish consistent tract boundaries over time, we used tract-level data in the 1990 and 2000 Decennial Censuses and from the American Community Survey (5-year estimates from 2006–2010 through 2010–2014). The data were then linearly interpolated to annual values and allocated to 2010 geographic boundaries. The resulting measure represents the total concentration of immigrants (not just those who arrived recently or have a specific race/ethnicity), which captures more fully the potential benefits and challenges that immigrants may bring to a neighborhood. We used this variable to estimate the total effect of neighborhood immigrant concentration on the likelihood of crime reporting. To assess the nonlinear relationships stated in the hypotheses, we incorporated higher order polynomial functions of the measure. That is, in the theoretical literature, researchers suggest the potential for both positive and negative nonlinear relationships, although the predictions of the theories are not precise. Because these nonlinear relationships could occur at different points along the distribution of % foreign born, we focused on higher order polynomial functions and reported quadratic and cubic functional forms that best fit the data.

<sup>&</sup>lt;sup>5</sup> We focused on incidents within this distance range because we were interested in how a neighborhood's level of immigrant concentration affects reporting. The NCVS location codes were "at/in/near" home,  $\leq 1$  mile,  $\leq 5$  miles,  $\leq 50$  miles, and > 50 miles. When comparing these with census tracts (mean = 42 miles<sup>2</sup> and mode = 2 miles<sup>2</sup>), a 5-mile radius will capture crimes in a neighborhood for most census tracts, although some tracts are much larger. We therefore used 5 miles to select incidents, although the use of other thresholds produced similar conclusions.

<sup>&</sup>lt;sup>6</sup> In supplementary analyses, similar results were found for two alternative indicators of immigrant concentration that distinguish the arrival time of immigrants (the percentage of neighborhood population made up of immigrants who immigrated in the past 10 years) and the ethnic background of immigrants (the percentage of neighborhood population that is Latino immigrant). The two measures were highly correlated with the level of total immigrant concentration (r = .90 and .81, respectively). These measures yielded similar conclusions (results available by request).

Traditional and nontraditional immigrant county destinations

In previous studies, scholars have used various geographic units (states, cities, counties, and metropolitan areas) to define immigrant destinations (see, e.g., Harris & Feldmeyer, 2013; Painter-Davis & Harris, 2016; Ramey, 2013; Shihadeh & Barranco, 2010; Xie, Heimer, Lynch, & Planty, 2018). For our study, counties are a desirable unit because they encompass employment, housing, education, police protection, and many other resources important to local residents. Counties are also useful because they are defined for the entire country across all land use types, encompassing not only urban areas but also suburban and rural areas.

Adapting a typology developed by Suro and Singer (2002), we defined traditional immigrant destinations as counties with long-established immigrant populations that exceeded the national average of immigrant concentration in 1990 (the immigrant share of the population was 7.9 percent in that year). These counties include immigration gateway centers such as Los Angeles, Chicago, New York City, and Miami (see the map in appendix B). In contrast, nontraditional immigrant destinations have shorter histories of concentrated immigrant settlement. Although one may further classify nontraditional destinations into two subgroups (counties that experienced a large increase in immigrant population after 1990 and counties that did not), we found in our preliminary analyses that these two groups of nontraditional destinations exhibited a similar relationship between neighborhood immigrant concentration and the likelihood of crime reporting (results available by request). Thus, for simplicity, we focused on the difference between traditional and nontraditional destinations in this article.

#### 2.2.3 | Control variables

For control variables, the analyses included characteristics of the incidents, victims, neighborhoods, counties, and regions that may influence the likelihood of reporting (for a full list of variables and their coding, see appendix C). Specifically, to control for differences across neighborhoods in the characteristics of crimes, we included crime type (rape/sexual assault, robbery, and assault),7 whether the crime was completed, the seriousness of crime (measured by crime with a gun, other weapon, use of physical force, and type of injury), the victim-offender relationship (intimate partner, family member, acquaintance, and stranger), whether the incident occurred in a private location, and whether the incident was a series crime according to the NCVS classification (see Baumer & Lauritsen, 2010; Xie, Pogarsky, Lynch, & McDowall, 2006). Other characteristics of victims included their age, sex, marital status, education, household income, and homeownership (Hart & Rennison, 2003; Hickman & Simpson, 2003).8

At the neighborhood level, we controlled for several important indicators of neighborhood stratification including the neighborhoods' socioeconomic status (SES), racial/ethnic composition, residential stability, and population density (Sampson & Bartusch, 1998). Neighborhood SES disadvantage was measured as the mean of standard scores on tract poverty rate, unemployment rate, percent femaleheaded households with children, median household income adjusted for inflation (sign reversed), percent households with public assistance income, and percent population 25 years and older without

<sup>7</sup> In unreported analyses, we separately analyzed simple assaults and serious violent crimes (which include rape, sexual assault, robbery, and aggravated assault). Because the two types of incidents showed similar findings regarding the relationship between neighborhood immigrant concentration and crime reporting (results available by request), we combined the incidents and used crime type as a control variable for the models reported in this article.

<sup>8</sup> To address the issue of missing income, the BJS used a hot deck imputation method to impute NCVS household income data (Berzofsky, Creel, Moore, Smiley-McDonald, & Krebs, 2014). As a sensitivity analysis, we also reestimated all models with the income variable removed and used the victims' employment status and education to measure the victims' income-earning abilities. The results were the same across these model specifications.

high-school diplomas (Cronbach's  $\alpha=0.89$ ). Following Baumer (2002), we created a squared term for the neighborhood disadvantage index to test a curvilinear relationship between disadvantage and the likelihood of reporting, whereby both affluent and disadvantaged neighborhoods may have lower rates of reporting than neighborhoods in between. *Neighborhood racial/ethnic composition* was measured by the percentages of racial/ethnic minorities (Black, Latino, Asian and Pacific Islander, and other group) and by the entropy index of the level of multigroup diversity in neighborhoods. *Neighborhood residential instability* was measured by two indicators: percent households that moved into their unit less than 10 years ago and percent vacant housing (Logan, Xu, & Stults, 2014). By inhibiting the development of social networks among residents (Bellair, 2000), these variables may negatively affect crime reporting rates. *Neighborhood population density* (population per square mile) and a binary indicator of a neighborhood's location inside a central city were also included in the analyses to account for the suggestion that police notification of crimes is higher in urban and more densely populated areas than in rural and less densely populated areas (Hart & Rennison, 2003). This proposition has some empirical support (Rennison, Dragiewicz, & DeKeseredy, 2013), although there is also evidence against this view (e.g., Kaylen & Pridemore, 2015; Xie & Lauritsen, 2012).

At the county level, we controlled for police force size (the number of full-time sworn officers per 1,000 population) and police expenditures per capita (in inflation-adjusted dollars). Counties with more police resources may be more effective in controlling crimes, and this may influence the likelihood of crime reporting by enhancing perceived police legitimacy, although the empirical evidence is mixed regarding the relationship between the amount of police resources and police effectiveness (see, e.g., Bayley, 1994; Ousey & Lee, 2010). <sup>10</sup> Census region variables (South, West, Midwest, and Northeast) were also included in the analyses to adjust for potential regional differences in attitudes toward the law and police (Chu, Rivera, & Loftin, 2000; Nisbett, 1993).

Finally, to control for differences in the likelihood of police notification over time, we included a year variable to examine whether a linear or polynomial time trend in crime reporting rate was apparent from 1996 to 2014 (see Baumer & Lauritsen, 2010; Xie, 2014). Because the addition of higher order polynomial year terms in the analyses did not add to the models' explanatory power, we reported the results only for the linear year term.

#### 2.3 | Analytical strategy

We evaluated the impact of neighborhood immigrant concentration on the likelihood of crime reporting through a series of logistic regression models, which are appropriate for our binary dependent variable. First, we pooled victims of all racial/ethnic groups to examine the difference between traditional and nontraditional immigrant destinations in the relationship between neighborhood immigrant concentration and crime reporting levels. Second, to evaluate our group-specific hypotheses, we reestimated the regression models separately by race/ethnicity (White, Black, and Latino).

<sup>&</sup>lt;sup>9</sup> Because of changes in census procedures during the study period, the residential mobility measure should be considered a proxy for household moves within the past decade. The 1990 and 2000 censuses explicitly referenced moves during the previous 10 years. In contrast, the rolling 5-year ACS files used for the study referenced moves since 2000, which less precisely approximates residential mobility in the prior decade.

<sup>&</sup>lt;sup>10</sup> We used data from the Census of State and Local Law Enforcement Agencies (CSLLEA, 1992–2008) and Law Enforcement Agency Roster (LEAR) 2016 (ICPSR 36697) to measure police force size. We aggregated data from local law enforcement agencies within the counties and used linear interpolation to estimate values in noncensus years. Data on police expenditures were obtained from the Census of Governments from 1992 to 2012. We used linear interpolation to estimate values in noncensus years, and the 2012 expenditures data were used as a proxy for expenditures in 2013.

To account for the stratified multistage cluster design of the NCVS, we incorporated NCVS design variables and survey weights in the estimation of the models to adjust for clustering of the data. In preliminary data analyses, we explored multilevel modeling and found that 47 percent of census tracts in the data had only one violent victimization and that 88 percent of tracts had fewer than five victimizations. This low level of clustering within census tracts, including the existence of singleton tracts (i.e., a census tract containing only one victimization), can yield biased parameters for testing random slope variances at the tract level in multilevel analyses (Snijders & Bosker, 1993). In light of this, we estimated survey logit models to incorporate the effect of clustering and stratification as well as the effect of sampling weights when computing the model estimates.

In the analyses, all neighborhood variables were lagged 1 year to capture the context of violent victimization for the year before the violent incident and thus keep the temporal measurement in accord with the causal ordering implicit in the analyses. A review of collinearity diagnostics (bivariate correlations, variance inflation factors, and condition number tests) indicated that there were no significant multicollinearity problems in the models.

#### 3 | RESULTS

By pooling data across 19 years (1996–2014), the NCVS accumulated large enough samples of violent victimizations in immigrant neighborhoods in both traditional and nontraditional destinations to obtain reliable estimates. Table 2 shows four panels of results that report the estimated association between neighborhood immigrant concentration and the likelihood of crime reporting, including a pooled model of all respondents and separate models by race/ethnicity. For brevity, the table does not include the estimated coefficients of the control variables. The full results are reported in table S1 in the online supporting information.11

In panel A, with all racial/ethnic groups combined, model 1 displays a third-order polynomial function of % foreign born that best fits the data. This relationship is illustrated in figure 1. The relationship is distinctively nonlinear, with the pattern of crime reporting comporting more with H1 than with H2, by showing significantly lower levels of crime reporting among victims from neighborhoods with very high concentrations of immigrants (e.g., more than 50 percent).

Although the overall pattern shown in figure 1 is noteworthy, we see in model 2 (panel A) that the association between neighborhood immigrant concentration and the likelihood of crime reporting is modified by county immigration context. That is, the interactions involving traditional immigrant county and % foreign born (linear and higher order terms) are all significant in shaping the outcome of crime reporting levels. We illustrate in figure 2 the patterns implied by this model. The triangle line of the graph represents traditional immigrant counties in which neighborhood immigrant concentration is weakly (and statistically insignificantly) related to the likelihood of reporting violence. In contrast, in nontraditional immigrant counties (the circle line), the likelihood of violence reporting is significantly related to neighborhood immigrant concentration in a nonlinear fashion and the magnitude of the association is substantial. For example, for an average victim in the NCVS, the probabilities of reporting violence are estimated at 52, 48, 53, and 5 percent corresponding to the level of immigrant concentration at 0, 10, 35, and 65 percent, respectively. Apparently, the concentration of immigrants becomes

<sup>11</sup> Additional supporting information can be found in the listing for this article in the Wiley Online Library at http://onlinelibrary. wiley.com/doi/10.1111/crim.2019.57.issue-2/issuetoc.

TABLE 2 Logistic regression models of reporting violent crimes by race/ethnicity, 1996-2014

	Mo	del 1	Mod	lel 2
Characteristics	b	(SE)	Ь	(SE)
Panel A: All Races Combined				
(N = 19,225  in all models)				
% foreign born	012	(.011)	039**	(.015)
× Traditional immigrant county			.046*	(.021)
% foreign born squared	.001	(.000)	.003**	(.001)
× Traditional immigrant county			003**	(.001)
% foreign born cubed	000*	(.000)	000**	(.000)
× Traditional immigrant county			.000**	(.000)
Panel B: White				
(n = 13,065  in all models)				
% foreign born	024	(.013)	034*	(.017)
× Traditional immigrant county			.050*	(.024)
% foreign born squared	.001*	(.001)	.002*	(.001)
× Traditional immigrant county			002*	(.001)
% foreign born cubed	000*	(000.)	000*	(.000)
× Traditional immigrant county			.000*	(.000)
Panel C: Black				
(n = 2,720  in all models)				
% foreign born	.040	(.031)	021	(.040)
× Traditional immigrant county			.050	(.054)
% foreign born squared	001	(.001)	.003	(.002)
× Traditional immigrant county			004*	(.002)
% foreign born cubed	.000	(.000)	000	(.000.)
× Traditional immigrant county			.000*	(.000.)
Panel D: Latino				
(n = 2,595  in all models)				
% foreign born	026	(.026)	152*	(.059)
× Traditional immigrant county			.173*	(.066)
% foreign born squared	.001	(.001)	.008**	(.003)
× Traditional immigrant county			009**	(.003)
% foreign born cubed	000*	(.000.)	000**	(.000)
× Traditional immigrant county			.000*	(.000)

Notes: The values ±.000 indicate that the estimates have more than 3 decimal places before a nonzero value (see table S1 in the online supporting information for the actual unrounded values). All control variables are included in the models, but the results are omitted for brevity (see table S1 for full results).

Abbreviation: SE = standard error.

p < .05; p < .01 (two-tailed test).

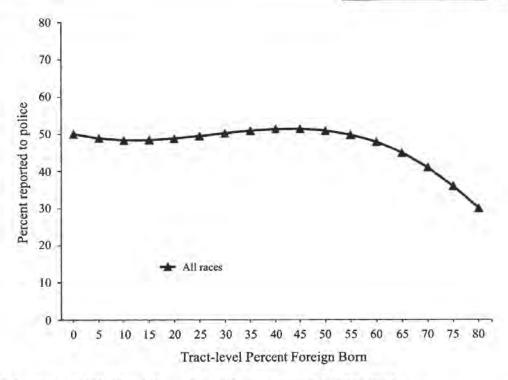


FIGURE 1 Estimated likelihood of reporting violence to the police, 1996-2014 Note: Percent foreign born was ranged from 0% to 80% in the data. The values of other variables were set to the means of the NCVS sample.

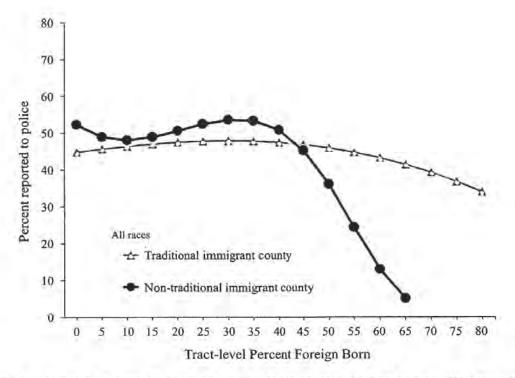


FIGURE 2 Estimated likelihood of reporting violence to the police by destination type, 1996-2014 [Color figure can be viewed at wileyonlinelibrary.com]

Note: Percent foreign born was ranged from 0% to 80% in traditional counties and 0% to 65% in nontraditional counties, respectively. The values of other variables were set to the means of the NCVS sample.

more influential after it reaches a high level in newer destinations (e.g., around 35 percent). <sup>12</sup> The results thus far offer the most support for H1 (a reduced likelihood of reporting related to immigrant concentration that emerges at high levels of immigrant concentration) but only in nontraditional, newer immigrant destinations. The slight *positive* relationship between immigrant concentration and violence reporting levels for neighborhoods at the middle range of immigrant concentration (e.g., around 10–35 percent) in nontraditional destinations is also statistically significant, but the magnitude of the relationship is small. Thus, the support for H2 is weak. We considered these patterns more fully in our analyses of race/ethnic-specific patterns of crime reporting, to which we turn next.

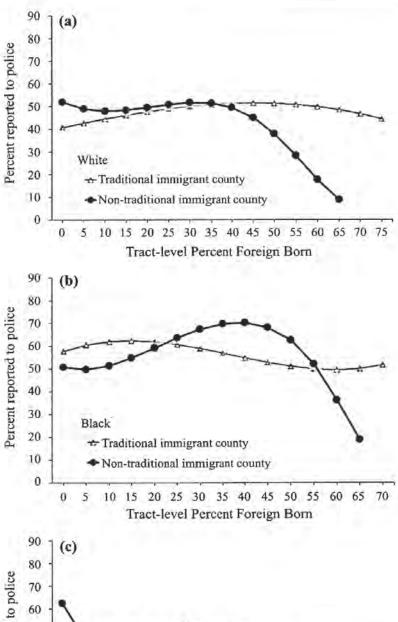
Following the pooled analysis, table 2 presents the results of parallel sets of models for White (panel B), Black (panel C), and Latino victims (panel D). For all three groups, we found a significant nonlinear relationship between % foreign born and the likelihood of violence reporting that is moderated by destination type, as the coefficients in table 2 indicate. The predicted reporting rates implied by these models are summarized in figure 3. We emphasize three main patterns from these results.

First, for all three ethnoracial groups, figure 3 illustrates that, within traditional immigrant counties (triangle lines), the likelihood of violence reporting changes little, or at most modestly, across different levels of % foreign born. For Whites and Blacks, the models reveal no significant association between % foreign born and the amount of violence reporting in traditional destinations. For Latinos, the relationship depicted by the triangle line in figure 3c reaches statistical significance at less than the .05 level, but the magnitude of the relationship is modest relative to that observed in nontraditional counties. For example, as the triangle line in figure 3c shows, the predicted rates of reporting in neighborhoods with very high levels of immigrant concentration are just slightly lower than the predicted rates of reporting observed in neighborhoods with no immigrants.

Second, within nontraditional immigrant destinations (circle lines), we find evidence of a significantly reduced likelihood of reporting among members of all three ethnoracial groups who reside in neighborhoods with high immigrant concentrations. For Whites and Blacks, this reduction in reporting is observed most notably in neighborhoods with high % foreign born (e.g., more than 40 percent). For Latinos, residents of such high-immigrant-concentration neighborhoods similarly show a large reduction in the likelihood of reporting, but the data also show a reduction in reporting at lower levels of % foreign born (e.g., 0–15 percent). Thus, the results create an impression that Latinos are the group that is most markedly affected by neighborhood immigrant concentration in reporting outcomes. Although the Latino and non-Latino group differences seem large, the differences among the estimated coefficients for the three ethnoracial groups are not statistically significant at the .05 level. The results support H1a (a reduced likelihood of reporting in neighborhoods with heavy immigrant concentration among all residents, irrespective of race or ethnicity). Still, we should note that we might have failed to find significant group differences because the sample size is small for Blacks and Latinos. We therefore caution against the interpretation of the results as definitive evidence for group invariance. Nonetheless,

<sup>12</sup> We used the full distribution of % foreign born represented in the data to illustrate the findings in figure 2 (0-65 percent for the full sample, and varying values for each racial/ethnic group, as revealed later). The conclusions are similar if we omit respondents with the highest values on % foreign born (e.g., ≥95th percentile). Nevertheless, the point estimates of the reporting rates are less precise at extremely high levels of % foreign born because of the sample size (see table S2 in the online supporting information). One should use caution when using these estimates, and it would be useful for future research to employ a larger sample.

<sup>&</sup>lt;sup>13</sup> We tested for group differences using three approaches. First, we tested interactions between % foreign born and race/ethnicity indicators. Second, as a further test, we specified % foreign born as a series of linear splines with knots placed at various points (e.g., a single knot at 30, 35, and 40 percent) and included products of these indicators and race/ethnicity indicators. Finally, we specified % foreign born as a series of linear splines with two knots placed at 10 and 35 percent, and then at 10 and 40 percent. None of these tests revealed significant group differences (results available by request).



Percent reported to police 50 40 30 Latino 20 ★ Traditional immigrant county 10 Non-traditional immigrant county 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 Tract-level Percent Foreign Born

FIGURE 3 Estimated likelihood of reporting violence to the police by race/ethnicity and destination type, 1996-2014 [Color figure can be viewed at wileyonlinelibrary.com] Note: Percent foreign born was ranged from 0% to 75% (White traditional), 0% to 65% (White nontraditional), 0% to 70% (Black traditional), 0% to 65% (Black nontraditional), 0% to 80% (Latino traditional), and 0% to 55% (Latino nontraditional). The values of other variables were set to the means of the NCVS sample.

our results indicate support for the prediction of a significant reduction in the likelihood of reporting in high-immigrant-concentration neighborhoods in nontraditional destinations that is shared by the three groups.

Finally, the evidence of a positive association between % foreign born and the likelihood of violence reporting is, again, comparatively weak in the race/ethnic-specific analyses. In nontraditional destinations, some increases reached statistical significance (namely for Whites and Latinos but not for Blacks; see coefficients in panels B-D, model 2), but the increases are of small magnitude, and they are found only when % foreign born ranges from approximately 10 to 35 percent (see circle lines in figures 3a, 3b, and 3c). In traditional counties, such an increase is only found to be statistically significant for Latinos, for whom the magnitude of change is also very small and occurs only at the lower range of % foreign born (see triangle line in figure 3c). Overall, the weight of evidence indicates that the observed increase in the likelihood of reporting is much less pronounced compared with the observed decrease in the likelihood of reporting observed in high-immigrant-concentration neighborhoods. These results comport poorly with H2, H2a, or H2b.

#### 4 | DISCUSSION

We used the NCVS data to address a long-standing unanswered question about whether victims are less, or more, likely to report violent victimizations occurring in immigrant neighborhoods. The results of our investigation, summarized in table 3, have important implications for theory and research on crime reporting, police—community relations, victim service delivery, and neighborhood-level research on immigration and crime that relies exclusively on police-based crime data.

#### 4.1 | Social and theoretical implications

We found little support for the predictions drawn from theories of perceived threat and immigrant revitalization. Instead, our findings are more consistent with theoretical arguments that emphasize the greater barriers that residents of immigrant neighborhoods may encounter in seeking police help. Within nontraditional destinations, all three groups considered in our study—Whites, Blacks, and Latinos—share a tendency to have considerably lower probabilities of reporting crime victimizations to the police when the level of immigrant concentration in their neighborhood reaches a high level. Based on the estimates reported in this study, their reporting rate starts to decrease significantly when immigrants constitute or surpass approximately one third of the neighborhood population.

Although we cannot directly assess whether the underreporting of crime occurs because of factors such as neighborhood-wide legal cynicism, other scholars have noted that such a process is especially likely to unfold in new, or newer, immigrant destinations. In many newly established destinations, the capacity for immigrant incorporation and support tends to be small or nonexistent (Massey, 2008; Millard & Chapa, 2004; Oropesa & Jensen, 2010). The political and criminal justice systems of these locations have been found to be less effective in assisting immigrant victims (Lyons et al., 2013). Additionally, the development of trusting relationships between citizens and the police is often challenged by the presence and application of local and federal immigration enforcement programs such as Secure Communities and 287g programs that may dissuade residents from calling on the police to help address crime problems (Kubrin, 2014; Martinez & Iwama, 2014). Newer destinations also have been found to be more likely than traditional destinations to enact law enforcement and other types of state legislations that are restrictive of immigrants' rights and opportunities (Pierotte et al., 2018). These conditions are ripe for generating high levels of legal cynicism, and this may be why we observe rates of reporting

TABLE 3 Summary of empirical results

		dictions on the Relat oncentration and Cr Behavior	And the Park of the Control of the C	
Theoretical Roots	Likelihood of Reporting in Immigrant Neighborhoods	Ethnoracial Invariance or Variation	Destination Type as Moderator	Empirical Support for a Positive/Negative Relationship (No Tests of Theoretical Mechanisms)
Place stratification; neighborhood legal cynicism	H1: Lesser; nonlinear	H1a: All racial/ethnic groups	Stronger in newer destinations	Strong support
		H1b: Especially marked for Latinos and, to a lesser extent, Blacks	Stronger in newer destinations	Needing further investigation; some appearance of a larger association for Latinos, but no significant group differences at .05 level
Neighborhood social capital; immigrant revitalization	H2: Greater; nonlinear	H2a: All racial/ethnic groups	Stronger in traditional destinations	Weak support; some small increase in reporting only in the midrange, not at the high level, of immigrant concentration; found in nontraditional destinations, not in traditional destinations
Perceived immigrant threat	H2: Greater; nonlinear	H2b: Limited to Whites	Stronger in newer destinations	Weak support; some small increase in reporting only in the midrange, not at the high level, of immigrant concentration; some sign of increase for Latinos and Blacks, not just for Whites

that are especially low in immigrant neighborhoods within new destinations (see, e.g., Bauer, 2009; Davis & Erez, 1998; Zatz & Smith, 2012).<sup>14</sup>

We do not observe similar patterns within traditional county immigrant destinations, where the data indicate no significant association between neighborhood immigrant concentration and the likelihood of crime reporting. The prevailing social organization within such areas may counter the tendency for legal cynicism to emerge in immigrant neighborhoods. In traditional destinations, resources and opportunities for immigrant incorporation tend to be more plentiful, and the longer time horizon of the immigration flows into these communities has facilitated the emergence of programs both within and outside the criminal justice system to provide support for crime victims (Davis & Erez, 1998).

<sup>&</sup>lt;sup>14</sup> A reviewer questioned whether a process by which immigrants select into lower crime areas could explain the results. We think that this is unlikely because, in a study in which the effects of crime rates on crime reporting were assessed, Warner (1992) reported either null or negative associations, meaning that if immigrants are selected into safer neighborhoods, the selection will produce similar or higher reporting rates, not lower ones. Also, if the findings are driven by selection, we would not expect similar results for Latinos, Blacks, and Whites, who have differential abilities to choose neighborhoods.

These features of many traditional destinations may help improve police-public relationships (Davis & Erez, 1998; Mitnik, Halpern-Finnerty, & Vidal, 2008). Indeed, other researchers suggest that in traditional destinations with especially supportive and progressive immigration policies (e.g., New York City), levels of legal cynicism may be significantly lower in immigrant neighborhoods, increasing the likelihood that residents report crime and cooperate with the police (Kirk et al., 2012). We cannot assess patterns within individual cities with the data used for our study, but it is plausible that such outcomes may occur in especially supportive settings.

Community differences in legal cynicism offer a plausible explanation for the key findings revealed in our study, but future research needs to be aimed at investigating more directly the impact of legal cynicism on crime reporting levels and whether it can account for the effects of immigrant concentration in newer destinations. Whatever underlies these patterns, the suppression of reporting in such areas raises concerns about the equitable delivery of victim support resources, as well as the capacity for the justice system to contribute to public safety in such areas. Currently, according to the 2016 American Community Survey, approximately three million people reside in neighborhoods in newer destinations with immigrant concentration surpassing 35 percent (see table S3 in the online supporting information). These neighborhoods are most vulnerable to the underreporting of crimes, according to our results. Although the population may be small in proportional terms, it represents a large number of individuals exposed to impaired access to police services. The size of the population residing in those neighborhoods also is forecasted to grow over time as the geographic diversification of immigrant settlement continues in the United States (Lichter, 2012; Massey, 2008).

#### 4.2 | Implications for research on immigration and crime

Our study also has important implications for ongoing debates about the relationship between neighborhood immigrant concentration and crime rates. Much of the prior research on this topic has been focused on comparisons across communities based on official police crime data. In this research, scholars have implicitly assumed that rates of crime reporting to the police are unrelated, or at most weakly related, to the level of immigrant concentration across communities (Ousey & Kubrin, 2018). Through our study, we provide more concrete evidence—rather than speculations—on this assumption. It helps clarify the implications of using police data to study the relationship between immigration and crime.

Specifically, based on our results, researchers should have more confidence in police data if the data come from neighborhoods in traditional destinations, if the neighborhoods have low-to-moderate levels of immigrant concentration, and if the neighborhoods have a small percentage of Latino residents. We include this last item because the overall impression of the NCVS data points to Latinos as the group most influenced by immigrant concentration. Latinos in newer destinations in our data show some visible reduction in the reporting of violence even when their level of neighborhood immigrant concentration is low (see figure 3c). When these conditions are not met, the quality of police data is more questionable, and there are more reasons for researchers to want to investigate the degree to which the police data may underestimate local crime rates because of the reduced likelihood of victim reporting.

Meanwhile, even as we recognize that the underreporting of crime is a real threat to research, especially for research in which police data from newer immigrant destinations are employed, it is important to point out that the findings of the study should *not* be taken as evidence that immigration is criminogenic, or that the findings of many published studies showing a crime-reduction benefit of increased immigration are merely artifacts of underreported crimes. In fact, in a recent study, Xie and Baumer (2018) found that, even by incorporating crimes unknown to the police by using data from the NCVS, the research findings still indicate a protective role of neighborhood immigrant concentration on

violence that is observed for people of various racial/ethnic and economic backgrounds. In other words, whereas the current study is important for understanding the limitations of police-recorded crime statistics, its findings do not alter the now well-established conclusion that crime rates are lower in immigrant neighborhoods (Ousey & Kubrin, 2018). Instead, the public policy and research implications of the study primarily concern police-community relations and victims' needs in high-immigrant-concentration neighborhoods located in nontraditional destinations. For example, if the police are not informed of crimes committed in those neighborhoods, are the victims being helped in any other way, such as getting help from family, friends, or other victim service providers? In case studies of victim needs in newer immigrant destinations, scholars have begun to tackle such questions (e.g., Denham et al., 2007; Fussell, 2011), but such efforts are far from sufficient. The need for theoretical elaboration and further analyses is clear.

#### 4.3 | Limitations and future directions

For future research, the most urgent need implied by our study is to understand how a mixture of competing forces (e.g., neighborhood legal cynicism, immigrant revitalization, and immigrant threat) operates to produce the empirical relationship between immigrant concentration and the likelihood of violence reporting observed in this study. One may hypothesize, based on the results reported in this study, that community-wide legal cynicism is more important for victims' violence reporting decisions than factors such as immigrant revitalization and immigrant threat. The findings cannot be unambiguously interpreted in this way, however, because the NCVS does not provide direct measures of the specified theoretical constructs like legal cynicism and threat. A more stringent test would require additional data to test the mechanisms of the theories. Given that it might be too costly or time-consuming to collect such data for neighborhoods nationwide, a more practical approach is to develop measures of the neighborhood attributes that are of theoretical importance for a smaller but carefully selected sample of locations in both traditional and nontraditional county destinations. The research effort could follow the example of case studies of neighborhoods in Chicago (Sampson, McAdam, MacIndoe, & Weffer-Elizondo, 2005), Philadelphia (Carr et al., 2007), and New York City (Kirk & Matsuda, 2011), but the work should be extended to newer destinations of immigration to gain insight into mechanisms at the neighborhood level that suppress or enhance the likelihood of crime reporting.

Beyond more direct measurement of key theoretical concepts, future research should be focused on considering two additional new directions. First, it would be valuable to integrate individual-level measures of immigration status. Although use of the NCVS offers a unique opportunity to assess the relationship between neighborhood immigrant concentration and the likelihood of victim crime reporting, it does not allow for exploration of victims' immigration status, so we cannot extend the analyses by distinguishing between immigrant and nonimmigrant residents. The redesigned NCVS (currently collecting data in the field) will provide a limited opportunity to assess this by integrating data on respondents' citizenship status. Within the next few years, as sufficient data are gathered across diverse communities, this innovation will enhance our ability to comprehend crime-reporting behavior among immigrants and nonimmigrants.

Second, it would be valuable to expand the national data infrastructure on social, economic, and legal contexts of immigrant receptivity, as well as to integrate such data in studies of crime reporting behavior. Expanding the NCVS to include more information about respondents' experiences with the police, for example, would provide contextual understanding about the formation of legal cynicism across different neighborhoods (Slocum, 2018). Further development of research aimed at examining new and traditional immigration destinations also would be valuable. This includes studies of challenges associated with immigrant incorporation in new immigrant gateways (e.g., Hall & Crowder, 2014; Lichter & Johnson, 2006; Park & Iceland, 2011), studies of economic opportunities or competitions in newer destinations (e.g., Barranco, 2014; Marrow, 2005; Parrado & Kandel, 2008), and studies of immigration policies and law enforcement practices across states and other local jurisdictions (e.g., Kubrin et al., 2012; Menjívar & Kanstroom, 2014; Pierotte et al., 2018; Varsanyi et al., 2012). To make this a concerted effort, the information in those studies can and should be integrated and linked to victimization data to advance our knowledge on victim decision-making. The resulting data and research initiatives will lead to increased understanding of the immigration and crime relationship.

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#### SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of the article.

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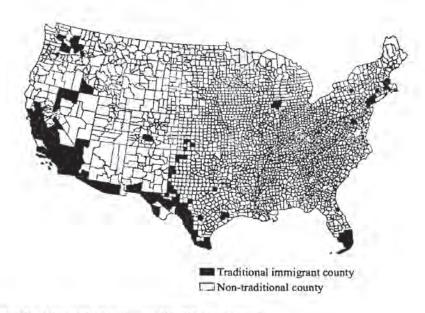
#### APPENDIX A: Descriptive Statistics of Study Variables

	All I	Races	W	hite	Bla	ack	La	tino
Characteristics	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)
Main Variables								
Violence reported to police	.482		.473		.534		.476	
Tract-level % foreign born	11.000	(12.000)	8.340	(9.360)	10.500	(10.800)	23.400	(15.500)
Traditional immigrant county	.284		.197		.327		.631	
Control Variables								
Neighborhood (tract) characteristics								
SES disadvantage	.112	(.791)	117	(.619)	.792	(.913)	.411	(.825)
% Black	16.000	(23.000)	8.410	(12.600)	50.600	(29.700)	11.600	(15.200)
% Latino	14.400	(19.300)	9.460	(13.100)	12.400	(15.200)	41.500	(27.900)
% Asian and Pacific Islander	3.930	(6.390)	3.540	(5.610)	2.990	(4,960)	5.450	(7.600)
% Other race	1.520	(3.370)	1.510	(2.670)	.913	(1.300)	1.340	(1.990)
Race entropy score	,667	(.324)	.613	(.319)	.716	(.311)	.835	(.290)

	All	Races	W	hite	B	ack	Latino		
Characteristics	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	
% moved into units < 10 years	64.300	(12.200)	63.800	(12.300)	63.900	(11.700)	66.900	(12.100	
% vacant housing	9.530	(7.140)	9.260	(7.530)	11.300	(6.280)	8.560	(5.860	
Population density	6286	(12519)	4636	(10789)	8958	(12743)	10641	(16929)	
Central city	.425		.339		.651		.560		
County context									
Police force size per 1,000	2.142	(.896)	1.981	(.795)	2.709	(1.002)	2.248	(.889	
Police expenditures	154.700	(102.000)	136.800	(84.600)	200.100	(126.800)	180.300	(105.000	
South	.326		.303		.438		.319		
Midwest	.274		.304		.292		.124		
West	.257		.246		.121		.435		
Victim characteristics									
Black	.164								
Latino	.135								
Other race	.044								
Age	30.400	(14.200)	31.300	(14.800)	29.200	(12.800)	27.267	(12.597	
Female	.489		.486		.531		.439		
Married	.203		.219		.112		.226		
Education	11.700	(2.850)	12.000	(2.860)	11.400	(2.450)	10.800	(2.930	
Household income	8.710	(3.990)	9.170	(3.970)	7.130	(3.770)	8.360	(3.840	
Homeowner	.456		.521		.276		.376		
Incident characteristics									
Rape	.049		.049		.061		.036		
Robbery	.117		.092		.175		.170		
Completed	.902		.911		.887		.876		
Gun	.074		.057		.128		.096		
Other weapon	.153		.141		.181		.175		
Physical force	.330		.320		.369		.328		
Serious injury	.031		.029		.035		.033		
Minor injury	.254		.248		,275		,252		
Intimate partner	.154		.154		.166		.130		
Family member	.075		.078		.069		.063		
Acquaintance	.364		.383		.337		.319		
Private location	.525		.524		.558		.474		
Series crimes	.041		.047		.030		.025		
Year of incident	2004	(5.450)	2004	(5.520)	2004	(5.020)	2005	(5.490)	
No. incidents (unweighted)	19,	225	13,	065	2,	720	2,	595	

Note: The summary statistics were weighted to represent the U.S. population. Abbreviation: SD = standard deviation; SES = socioeconomic status.

#### APPENDIX B: Counties by Immigrant Destination Type



[Color figure can be viewed at wileyonlinelibrary.com]

#### APPENDIX C: Coding of Study Variables

Dependent Variable	
Violence reported to police	1 = yes; 0 = no
Independent Variables	
White victim	1 = Non-Latino White; 0 = no
Black victim	1 = Non-Latino Black; 0 = no
Latino victim	1 = Latino; 0 = no
Other-race victim	1 = Non-Latino other race; 0 = no
Tract-level % foreign born	Percentage of the tract population that is foreign born
Traditional immigrant county	1 = yes; 0 = no
Tract Characteristics	
SES disadvantage	Neighborhood disadvantage index
% Black	Percentage of tract population that is non-Latino Black
% Latino	Percentage of tract population that is Latino
% Asian and Pacific Islander	Percentage of tract population that is non-Latino Asian and Pacific Islander
% Other race	Percentage of tract population that is non-Latino other race
Race entropy score	A tract's entropy score is $E = \sum_{i=1}^{5} (\prod_{i}) In[1/\prod_{i}]$ where $\prod_{i}$ refers to a particular racial/ethnic group's proportion of the tract population. The five racial/ethnic groups are Latinos, non-Latino Whites, Blacks, Asians and Pacific Islanders, and other races.
% moved into units < 10 years	Percentage of households that moved into units less than 10 years ago
% vacant housing	Percentage of vacant housing units
Population density	Persons per square mile
Central city	1 = yes; 0 = no

County Context

Police force size per 1,000 Number of full-time sworn police officers per 1,000 population

Police expenditures Police expenditures per capita (inflation-adjusted 2010 dollars)

South 1 = yes; 0 = noMidwest 1 = yes; 0 = noWest 1 = yes; 0 = no

Victim Characteristics

Age In years

Female 1 = yes; 0 = noMarried 1 = yes; 0 = no

Education Level of victim education (0 to 22)

Household income Level of household income (1 to 14)

Homeowner 1 = victim/family owned its home; 0 = no

Incident Characteristics

Rape 1 = rape/sexual assault; 0 = no

Robbery 1 = yes; 0 = noCompleted 1 = yes; 0 = no

Gun 1 = offender had a gun; 0 = no

Other weapon 1 = offender had other weapon; 0 = no

Physical force 1 = offender used physical force (hit/shot victim with a gun, stabbed

or attacked victim with a knife, hit victim with another object, or

slapped or knocked down victim); 0 = no

Serious injury 1 = victim suffered serious injury (broken bones, loss of teeth, internal

injuries, loss of consciousness, or an undetermined injury requiring

hospitalization); 0 = no

Minor injury 1 = victim suffered other minor injury; 0 = no

Intimate partner 1 = offender was a current or former spouse, boyfriend, or girlfriend;

0 = no; incidents involving multiple offenders were coded

according to the most intimate relationship between the victim and

any of the offenders.

Family member 1 = offender was a family member (parent, child, brother, sister, or

other relatives); 0 = no

Acquaintance 1 = offender was an unrelated acquaintance; 0 = no

Stranger 1 = offender was someone never seen before or someone known by

sight only; 0 = no

Private location 1 = incident occurred in/near victim's home or home of a

friend/relative/neighbor, 0 = no

Series crimes 1 = Six or more incidents similar in nature and the respondent is

unable to recall details of each incident; 0 = no

Year of incident The year in which the incident occurred

# State & Local Tax Contributions of Young Undocumented Immigrants

### Institute on Taxation & Economic Policy

**April 2017** 

Misha E. Hill Meg Wiehe

#### **About The Institute on Taxation & Economic Policy**

The Institute on Taxation and Economic Policy (ITEP) is a non-profit, non-partisan 501 (c) 3 organization that produces timely, accessible, and sound analyses on federal, state, and local tax policy issues. ITEP's research helps inform policy makers, advocates, the media and general public about the fairness, adequacy, and sustainability of existing tax structures and how proposed tax changes would impact revenues and taxpayers across the income spectrum.

#### Acknowledgments

ITEP extends special thanks to David Dyssegaard Kallick at the Fiscal Policy Institute, Erica Williams at the Center on Budget and Policy Priorities, Jeanne Batalova at the Migration Policy Institute, and Wesley Tharpe at the Georgia Budget and Policy Institute for their guidance on this report.

#### Introduction

The Trump administration's immigration policies have broken apart families and removed established members of communities. The administration's disregard for the contributions of immigrants, regardless of their legal status, is of real concern for young immigrants whose parents brought them to the United States as children. Many of those young immigrants qualify for deferred deportation action and legal work authorization under Deferred Action for Childhood Arrivals (DACA), a 2012 executive order under President Barack Obama.

While it remains unclear what actions, if any, President Trump will take to amend DACA, the policy guidance the president has given to federal agencies has resulted in detentions and deportations of individuals reportedly eligible for deferred action. The ambiguity of the Trump Administration's statements and actions relating to the DACA program makes it essential that clear and accurate data about the DACA population is available.

More than 1.3 million out of the 11 million undocumented immigrants living in the United States are eligible for DACA.

#### What is DACA?

Deferred Action for Childhood Arrivals provides temporary deferral from deportation and work authorization. Individuals must apply for DACA status through U.S. Citizenship and Immigration Services. Approved individuals maintain their status for two years and must apply to renew their eligibility.

To qualify for DACA an individual must:

- ✓ Be between the ages of 15 and 30
- ✓ Have arrived in the U.S. prior to the age of 16
- ✓ Have continuously resided in the U.S. for at least five years prior to their application for deferred action
- ✓ Be enrolled in an approved education course, have completed high school or its equivalency, or have been honorably discharged from military service
- ✓ Not have been convicted of a felony, significant misdemeanor, three or more misdemeanors, or "otherwise pose a threat to public safety or national security"

Note: See "DACA at Four" and "DACA at the Two-Year Mark" from the Migration Policy Institute for more detailed information.

As of September 2016, more than 852,000 individuals were enrolled in the program. DACA offers eligible teenagers and young adults who were brought to the United States as children outside of their control temporary deferral from deportation and legal work authorization.

DACA enrollment has helped young immigrants become more engaged in their communities. A national survey of DACA enrollees in 2016 found that more than 40 percent of respondents secured their first job after enrollment in DACA, and more than 60 percent landed a job with better pay. DACA enrollment also allowed 60 percent of respondents to pursue educational opportunities that were previously unavailable to them. The young immigrants enrolled in DACA work in diverse industries, including educational and health services, wholesale and retail trade, and professional and business services.

The 1.3 million young immigrants eligible for deferred action contribute tax dollars to communities that help pay for schools, public infrastructure, and other services. Their contributions could be increased by taking steps to ensure that all individuals eligible for deferred action are enrolled, or even by offering a path to citizenship. Conversely, stripping their temporary lawful status or deporting them would decrease their tax contributions and deprive our country of a dedicated and diverse generation.

Institute on Taxation and Economic Policy 2

An ITEP report from March 2017 found the 11 million undocumented immigrants living and working in the United States contribute more than \$11.74 billion in state and local taxes.<sup>3</sup> This report specifically examines the state and local tax contributions of undocumented immigrants who are currently enrolled or immediately eligible for DACA and the fiscal implications of various policy changes. The report includes information on the national impact (Table 1) and provides a state-by-state breakdown (Appendix 1).

#### **Key Findings**

- The 1.3 million young undocumented immigrants enrolled or immediately eligible for DACA **contribute** an estimated \$2 billion a year in state and local taxes. <sup>4</sup> This includes personal income, property, and sales and excise taxes.
- DACA-eligible individuals pay on average **8.9 percent of their income** in state and local taxes. Their effective tax rate is higher than the average rate paid by the top 1% of taxpayers in state and local taxes of just 5.4 percent and is on par with the average rate paid of 9.4 percent paid by the middle 20 percent of taxpayers.<sup>5</sup>
- Continuing DACA and ensuring all who are eligible for the program are enrolled would **increase estimated state and local revenue by \$425 million**, bringing the total contribution to \$2.45 billion, and increasing the effective tax rate for those enrolled to 9 percent.
- Replacing DACA with a path to citizenship could provide nearly \$505 million in additional state and local taxes, increasing total contributions to at least \$2.53 billion a year.
- Repealing the temporary legal status and work authorizations permitted by DACA would reduce
   estimated state and local revenues by nearly \$800 million, and drop the total contributions to just over
   \$1.2 billion annually.
- Every state benefits from the economic contributions of the young immigrants eligible for DACA (see Appendices 1 and 2). For example, the 379,000 young immigrants living in California are contributing more than \$534 million to the golden state while the 2,000 immigrants in our nation's capital contribute \$2.7 million to the District. Likewise, every state stands to lose considerable revenue if we do not maintain the protections and opportunities DACA has allowed.

## How federal policy changes in the treatment of young immigrants affect state and local revenues

Questions have frequently been raised about the taxes paid by undocumented immigrants. Everyone living and working in the U.S. contributes to state and local taxes, regardless of their immigration status. We all pay sales and excise taxes when we purchase goods and services such as clothing or gasoline. We all pay property taxes either directly for our homes or indirectly as renters.

As ITEP's March report demonstrated, about half of undocumented immigrants file income tax returns. They do this using Individual Taxpayer Identification Numbers (ITINs) in the absence of having valid Social Security numbers. Because DACA provides young immigrants with work authorization, recipients are subject to the same state and local personal income tax laws as all lawfully present workers. DACA recipients do have (temporary) Social Security numbers.

The tax revenues generated by DACA recipients are further boosted by the fact that DACA status boosts employment rates and wages. A national survey of DACA recipients found that employment rates increased by 36 percentage points after enrollment, from 51 percent of respondents employed to 87 percent. Evidence also shows that relief from deportation and temporary work permits through programs like DACA also boosts undocumented immigrants' wages by at least 8.5 percent. When given the opportunity to work legally and a reprieve from deportation DACA recipients are able to work more, earn more wages, and are less likely to be victims of wage theft from unscrupulous employers.

#### Table 1: U.S. Total of State and Local Tax Contributions of DACA-eligible individuals

Current and potential contributions of individuals currently receiving or eligible for DACA status

	Currently receiving DACA (852,000)	Currently eligible but not receiving (452,900)	Total DACA-eligible population (1.3 million)	Change from Current Contribution
Current Taxes	\$1,603,068,000	\$423,765,000	\$2,026,833,000	
Taxes if All Eligible Receiving	\$1,603,068,000	\$849,546,000	\$2,452,614,000	+\$425,781,000
If granted citizenship	\$1,654,779,000	\$876,951,000	\$2,531,730,000	+\$504,897,000
If DACA protections lost	\$805,751,000	\$423,765,000	\$1,229,516,000	(\$797,317,000)

Based on this evidence, we assume that 87 percent of the 852,000 young immigrants currently enrolled in DACA are employed, and that they are earning, on average, 8.5 percent more than the estimated 452,900 young people eligible for but not receiving DACA. The higher earnings, higher employment rate, and higher tax compliance rate

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of individuals enrolled in DACA leads to their increased tax contributions and higher effective tax rate compared to those eligible for but not receiving DACA. The total contributions of individuals currently receiving or eligible for DACA status is just over \$2 billion in state and local taxes annually. If all eligible individuals were enrolled in DACA, those state and local tax contributions would increase by more the \$425 million due to higher earnings, higher employment rate, and 100 percent tax compliance for all DACA eligible immigrants (see Table 1).

Granting DACA eligible immigrants a path to citizenship would provide an even larger wage boost. A 2013 analysis by the Congressional Budget Office estimated a 12 percent wage boost for undocumented citizens who were granted a path to citizenship.<sup>7</sup> State and local revenues would net an additional \$505 million if the 1.3 million young people currently eligible for or receiving DACA were granted a path to citizenship (see Table 1).

In contrast, failing to maintain work authorizations and deportation relief of DACA would hurt state and local coffers. If the 852,000 young immigrants currently enrolled lost the protections of DACA, it would reduce their state and local tax contributions by nearly \$800 million (see Table 1).

Just as every state benefits from the tax contributions of young undocumented immigrants every state has much more to lose if we remove the protections and work authorization granted to these young immigrants who were brought to the United States as children and have always considered it home. If the Trump administration fails to protect this population from deportation, the nation risks forcing them back into the shadows and losing the economic and societal contributions these engaged young people are making in their communities.

#### Methodology

ITEP estimates the state and local tax contributions of DACA-eligible immigrants under different policy options through the methodology detailed below.

#### 1. Estimated DACA- eligible and enrolled population in each state

- The number of young immigrants in each state immediately eligible for DACA comes from the Migration Policy Institute. MPI estimated just under 1.3 million young immigrants nationwide are immediately eligible for DACA. MPI's estimates are limited to 41 states and the District of Columbia. To calculate the eligible population in the nine missing states, ITEP used the enrollee data (see below) for each state to estimate a total eligible population (see Appendix 2).
- The number of people currently enrolled in DACA nationally (852,000) and in each state comes from the United States Citizenship and Immigration Services<sup>9</sup>. (see Appendix 2).

#### 2. Taxpaying units and employment status

• This analysis treats each DACA-eligible immigrant who is working as a single taxpaying unit.

- The employment rate of immigrants depends on legal status. A 2016 national survey of 1,308 DACA recipients found that 87 percent of respondents were employed, compared to only 51 percent before gaining lawful status. The assumed employment rate of DACA-eligible immigrants with legal status, either those participating in the program or granted a pathway to citizenship, is 87 percent. The assumed employment rate of DACA-eligible immigrants who are not enrolled in the program is 51 percent. Additionally, to calculate the impact on tax contributions if DACA protections are removed, 51 percent was applied to the total DACA-eligible population.
- Here's how the national numbers break down (see Appendix 2 for state numbers):

	Population	Workforce Participation %	Estimated Workers
Eligible DACA Population	1,304,900		
Enrolled DACA Population	852,000	87%	740,400
Eligible, but unenrolled DACA Population	452,900	51%	232,300
Eligible, but no DACA protections		51%	669,400

#### 3. Income

- Immigrant wages change depending on legal status. Undocumented workers earn \$22,029 a year on average and granting DACA status increases wages by 8.5 percent, according to a 2014 report by the Center for American Progress<sup>11</sup>. Putting immigrants on a path to citizenship would carry a larger effect, since it grants rights and protections associated with permanent residence. The Congressional Budget Office estimates a path to citizenship would boost wages by 12 percent<sup>12</sup>. The average wages applied to the estimated DACA working population in this analysis are:
  - o \$23,901 for the DACA-eligible population working and enrolled in the program.
  - o \$22,029 for the DACA-eligible population working, but not enrolled in the program.
  - o \$24,673 for the DACA-eligible population working and granted a pathway to citizenship.

### 4. Estimated effective tax rates (taxes as share of income) for sales, income, and property taxes paid by DACA-eliqible population in each state<sup>13</sup>

ITEP's microsimulation computer model is a sophisticated program that applies the state and local tax laws in each state (including sales, excise, income, and property tax laws) to a statistically valid database of tax returns to generate estimates of the effective tax rates paid by taxpayers at various income levels under state and local tax law in place as of December 31, 2014. In January of 2015, ITEP released the 5th edition of *Who Pays*? which estimates the effect of

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the state and local tax laws as of January 2015 on taxpayers at 2012 income levels. This report applies effective tax rates calculated in the 2015 *Who Pays*? report to the DACA eligible population.

### The following assumptions were made to calculate the sales and excise, income, and property taxes of the undocumented immigration population:

- Sales and excise taxes: Sales and excise taxes are collected by retailers every time a purchase is made on a taxable good or service. It is reasonable to assume that DACA eligible immigrants pay sales and excise taxes at similar rates to U.S. citizens and legal immigrants with similar incomes thus the estimated rates in ITEP's Who Pays? for each state were applied to the various estimated DACA-eligible population incomes.
- Income tax: Eligible immigrants enrolled in DACA are required to pay personal income taxes using a temporary social security number. Thus, this study assumes the 740,400 DACA-enrolled workers are fully complying with state personal income taxes. 100 percent compliance is also assumed under the path to citizenship policy option. Personal income tax effective rates in each state were applied accordingly. Various studies have estimated between 50 and 75 percent of undocumented immigrants currently pay personal income taxes predominantly using Individual Tax Identification (ITIN) numbers or with false social security numbers. <sup>14</sup> This analysis assumes a 50 percent compliance rate for DACA-eligible immigrants who are not enrolled and applies 50 percent compliance if DACA protections are lost. Personal income tax effective rates in each state were applied to 50 percent of the estimated income.

Enrolled DACA recipients are eligible to receive the federal Earned Income Tax Credit (EITC) and the state versions of the credit as well, however state EITC benefits were not included in this study for two reasons: 1) all DACA-eligible workers are treated as single taxpaying units and 2) the average income of the enrolled DACA population is above the EITC income eligibility amounts for single workers. The impact of state EITCs was also left out of the other policy options given that DACA-eligible immigrants not enrolled in the program are ineligible for the credit.

• **Property tax:** The first step in calculating property taxes was to identify the share of DACA-eligible immigrants who are homeowners or renters in each state. This analysis used state-by-state data from the Migration Policy Institute to estimate homeownership rates for undocumented immigrants in each state. The model assumes that for renters, half of the cost of the property tax paid initially by owners of rental properties is passed through to renters.

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 $\frac{https://www.uscis.gov/sites/default/files/USCIS/Resources/Reports\%20and\%20Studies/Immigration\%20Forms\%20Data/All\%20Form\%20}{Types/DACA/daca\_performancedata\_fy2016\_qtr4.pdf}$ 

- <sup>5</sup> Davis, Carl, et al. "Who Pays? A Distributional Analysis of the Tax Systems in All 50 States, 5<sup>th</sup> ed.", Institute on Taxation and Economic Policy, Jan. 2015, <a href="https://www.whopays.org">www.whopays.org</a>.
- 6 "Results of Tom K. Wong, United We Dream, National Immigration Law Center, and Center for American Progress National Survey." Center for American Progress, <a href="https://cdn.americanprogressaction.org/content/uploads/2016/10/2111136/2016-daca\_survey\_draft\_updated-FINAL2.pdf">https://cdn.americanprogressaction.org/content/uploads/2016/10/2111136/2016-daca\_survey\_draft\_updated-FINAL2.pdf</a>
- <sup>7</sup> "Economic Impact of S. 744, Border Security, Economic Opportunity, and Immigration Modernization Act." *Congressional Budget Office*, Congressional Budget Office, Jun. 2013, <a href="https://www.cbo.gov/sites/default/files/113th-congress-2013-2014/reports/44346-Immigration.pdf">www.cbo.gov/sites/default/files/113th-congress-2013-2014/reports/44346-Immigration.pdf</a>.
- <sup>8</sup> See endnote 2 and Migration Policy Institute, "Deferred Action for Childhood Arrivals (DACA) Data Tools." http://www.migrationpolicy.org/programs/data-hub/deferred-action-childhood-arrivals-daca-profiles#overlay-context=events
- <sup>9</sup> USCIS (see endnote 1)
- <sup>10</sup> Center for American Progress (see endnote 6)
- <sup>11</sup> Oakford, Patrick. "Administrative Action on Immigration Reform." Center for American Program, September 2014. https://www.americanprogress.org/issues/immigration/reports/2014/09/04/96177/administrative-action-on-immigration-reform/
- <sup>12</sup> Congressional Budget Office (see endnote 7)
- <sup>13</sup> Institute on Taxation and Economic Policy (see endnote 3)
- <sup>14</sup> See among others: Feinleib, Joel, and David Warner. "Issue Brief #1: The Impact of Immigration on Social Security and the National Economy." *Social Security Advisory Board*, Social Security Advisory Board, Dec. 2005, <a href="https://www.ssab.gov/Portals/0/OUR\_WORK/REPORTS/Impact%20of%20Immigration%20on%20Social%20Security%20Brief\_2005.pdf">www.ssab.gov/Portals/0/OUR\_WORK/REPORTS/Impact%20of%20Immigration%20on%20Social%20Security%20Brief\_2005.pdf</a>; Singer, Paula, and Linda Dodd-Major. "Identification Numbers and U.S. Government Compliance Initiatives." *Tax Analysts*, 20 Sept, 2004; and Cornelius, Wayne, and Jessica Lewis. *Impacts of Border Enforcement on Mexican Migration: The View from Sending Communities*, La Jolla, Calif.: University of California at San Diego, Center for Comparative Immigration Studies, 2007.

<sup>&</sup>lt;sup>1</sup> "Deferred Action for Childhood Arrivals Process (Through Fiscal Year 2016, 4th Qtr.)." United States Citizenship and Immigration Services (USCIS). Available at:

<sup>&</sup>lt;sup>2</sup> Batalova, Jeanne, et al. "DACA at the Two-Year Mark: A National and State Profile of Youth Eligible and Applying for Deferred Action." Migration Policy Institute, Aug. 2014, <a href="http://www.migrationpolicy.org/research/daca-two-year-mark-national-and-state-profile-youth-eligible-and-applying-deferred-action">http://www.migrationpolicy.org/research/daca-two-year-mark-national-and-state-profile-youth-eligible-and-applying-deferred-action</a>

<sup>&</sup>lt;sup>3</sup> Christensen Gee, et al. "Undocumented Immigrants' State and Local Tax Contributions." Institute on Taxation and Economic Policy, Mar. 2017, <a href="http://www.itep.org/pdf/immigration2017.pdf">http://www.itep.org/pdf/immigration2017.pdf</a>

<sup>&</sup>lt;sup>4</sup> See the methodology section for more information on the calculation of estimated undocumented immigrant state and local tax payments.

# Case 1:18-cv-00068 Document 611-1 Filed on 11/04/22 in TXSD Page 538 of 704 Appendix 1: State and Local Tax Contributions of DACA-eligible individuals

Current and potential contributions of those currently receiving or eligible for DACA status

State	Current State and Local Taxes	Current Effective Tax Rate	Taxes if All Eligible Receiving	Change if All Eligible are Receiving	New Effective Tax Rate	Taxes if All Eligible Granted Citizenship	Change if All Granted Citizenship	New Effective Tax Rate2	Taxes if DACA Protections Lost	Change if DACA Protections are Lost	New Effective Tax Rate3
Alabama	\$13,220,000	9.0%	\$17,605,000	+\$4,385,000	9.4%	\$18,172,000	+\$4,952,000	9.4%	\$8,376,000	-\$4,844,000	8.2%
Alaska*	\$966,000	4.0%	\$1,659,000	+\$693,000	4.0%	\$1,712,000	+\$746,000	4.0%	\$903,000	-\$63,000	4.0%
Arizona	\$61,357,000	9.0%	\$65,837,000	+\$4,480,000	9.1%	\$67,961,000	+\$6,604,000	9.1%	\$33,274,000	-\$28,083,000	8.4%
Arkansas	\$15,894,000	11.1%	\$18,821,000	+\$2,927,000	11.3%	\$19,428,000	+\$3,534,000	11.3%	\$9,336,000	-\$6,558,000	10.3%
California	\$534,124,000	8.2%	\$652,389,000	+\$118,265,000	8.3%	\$673,433,000	+\$139,309,000	8.3%	\$334,630,000	-\$199,494,000	7.8%
Colorado	\$33,977,000	7.8%	\$37,631,000	+\$3,654,000	7.9%	\$38,845,000	+\$4,868,000	7.9%	\$17,479,000	-\$16,498,000	6.7%
Connecticut	\$17,639,000	10.0%	\$23,269,000	+\$5,630,000	10.2%	\$24,019,000	+\$6,380,000	10.2%	\$12,144,000	-\$5,495,000	9.8%
Delaware	\$2,434,000	5.0%	\$3,377,000	+\$943,000	5.4%	\$3,486,000	+\$1,052,000	5.4%	\$1,410,000	-\$1,024,000	4.2%
District of Columbia*	\$2,702,000	8.7%	\$3,910,000	+\$1,208,000	9.4%	\$4,036,000	+\$1,334,000	9.4%	\$1,756,000	-\$946,000	7.8%
Florida	\$100,239,000	8.5%	\$127,799,000	+\$27,560,000	8.5%	\$131,922,000	+\$31,683,000	8.5%	\$69,534,000	-\$30,705,000	8.5%
Georgia	\$71,705,000	9.0%	\$90,911,000	+\$19,206,000	9.3%	\$93,844,000	+\$22,139,000	9.3%	\$43,172,000	-\$28,533,000	8.1%
Hawaii	\$3,223,000	11.2%	\$4,978,000	+\$1,755,000	12.0%	\$5,138,000	+\$1,915,000	12.0%	\$2,353,000	-\$870,000	10.4%
Idaho	\$6,026,000	7.9%	\$6,578,000	+\$552,000	7.9%	\$6,791,000	+\$765,000	7.9%	\$3,288,000	-\$2,738,000	7.3%
Illinois	\$131,028,000	11.0%	\$159,279,000	+\$28,251,000	11.3%	\$164,417,000	+\$33,389,000	11.3%	\$76,260,000	-\$54,768,000	9.9%
Indiana	\$23,288,000	10.4%	\$23,784,000	+\$496,000	10.4%	\$24,552,000	+\$1,264,000	10.4%	\$10,755,000	-\$12,533,000	8.7%
lowa	\$6,807,000	9.2%	\$7,806,000	+\$999,000	9.4%	\$8,058,000	+\$1,251,000	9.4%	\$3,594,000	-\$3,213,000	8.0%
Kansas	\$14,592,000	9.2%	\$15,361,000	+\$769,000	9.2%	\$15,856,000	+\$1,264,000	9.2%	\$7,699,000	-\$6,893,000	8.5%
Kentucky	\$9,093,000	9.1%	\$12,116,000	+\$3,023,000	9.7%	\$12,507,000	+\$3,414,000	9.7%	\$5,182,000	-\$3,911,000	7.6%
Louisiana	\$7,459,000	9.5%	\$10,221,000	+\$2,762,000	9.8%	\$10,551,000	+\$3,092,000	9.8%	\$5,061,000	-\$2,398,000	9.0%
Maine*	\$256,000	7.7%	\$330,000	+\$74,000	8.0%	\$341,000	+\$85,000	8.0%	\$160,000	-\$96,000	7.1%
Maryland	\$40,801,000	10.8%	\$56,926,000	+\$16,125,000	11.4%	\$58,762,000	+\$17,961,000	11.4%	\$26,907,000	-\$13,894,000	9.9%
Massachusetts	\$24,261,000	8.1%	\$34,426,000	+\$10,165,000	8.7%	\$35,537,000	+\$11,276,000	8.7%	\$15,052,000	-\$9,209,000	7.0%
Michigan	\$15,938,000	8.9%	\$18,952,000	+\$3,014,000	9.1%	\$19,563,000	+\$3,625,000	9.1%	\$8,666,000	AR2022 <u>0</u> 501528	8 <sup>7.7%</sup>

# Case 1:18-cv-00068 Document 611-1 Filed on 11/04/22 in TXSD Page 539 of 704 Appendix 1: State and Local Tax Contributions of DACA-eligible individuals

Current and potential contributions of those currently receiving or eligible for DACA status

State	Current State and Local Taxes	Current Effective Tax Rate	Taxes if All Eligible Receiving	Change if All Eligible are Receiving	New Effective Tax Rate	Taxes if All Eligible Granted Citizenship	Change if All Granted Citizenship	New Effective Tax Rate2	Taxes if DACA Protections Lost	Change if DACA Protections are Lost	New Effective Tax Rate3
Minnesota	\$15,439,000	8.7%	\$18,766,000	+\$3,327,000	9.0%	\$19,372,000	+\$3,933,000	9.0%	\$8,550,000	-\$6,889,000	7.6%
Mississippi	\$4,169,000	8.4%	\$5,442,000	+\$1,273,000	8.7%	\$5,618,000	+\$1,449,000	8.7%	\$2,593,000	-\$1,576,000	7.6%
Missouri	\$8,430,000	8.1%	\$10,513,000	+\$2,083,000	8.4%	\$10,852,000	+\$2,422,000	8.4%	\$4,916,000	-\$3,514,000	7.2%
Montana*	\$101,000	5.3%	\$112,000	+\$11,000	5.4%	\$116,000	+\$15,000	5.4%	\$50,000	-\$51,000	4.4%
Nebraska	\$7,693,000	9.6%	\$8,013,000	+\$320,000	9.6%	\$8,272,000	+\$579,000	9.6%	\$3,905,000	-\$3,788,000	8.6%
Nevada	\$17,488,000	5.6%	\$18,595,000	+\$1,107,000	5.6%	\$19,195,000	+\$1,707,000	5.6%	\$10,117,000	-\$7,371,000	5.6%
New Hampshire*	\$812,000	7.6%	\$946,000	+\$134,000	7.6%	\$976,000	+\$164,000	7.6%	\$512,000	-\$300,000	7.5%
New Jersey	\$65,968,000	7.9%	\$90,221,000	+\$24,253,000	8.2%	\$93,131,000	+\$27,163,000	8.2%	\$44,911,000	-\$21,057,000	7.5%
New Mexico	\$18,848,000	10.3%	\$21,646,000	+\$2,798,000	10.4%	\$22,345,000	+\$3,497,000	10.4%	\$11,288,000	-\$7,560,000	10.0%
New York	\$140,035,000	10.7%	\$174,199,000	+\$34,164,000	11.0%	\$179,818,000	+\$39,783,000	11.0%	\$84,137,000	-\$55,898,000	9.8%
North Carolina	\$63,618,000	8.6%	\$75,296,000	+\$11,678,000	8.8%	\$77,725,000	+\$14,107,000	8.8%	\$34,532,000	-\$29,086,000	7.5%
North Dakota	\$286,000	8.6%	\$360,000	+\$74,000	8.7%	\$371,000	+\$85,000	8.7%	\$190,000	-\$96,000	8.4%
Ohio	\$14,103,000	9.4%	\$18,397,000	+\$4,294,000	9.8%	\$18,991,000	+\$4,888,000	9.8%	\$8,586,000	-\$5,517,000	8.4%
Oklahoma	\$17,411,000	9.5%	\$20,064,000	+\$2,653,000	9.7%	\$20,711,000	+\$3,300,000	9.7%	\$9,950,000	-\$7,461,000	8.8%
Oregon	\$20,021,000	7.1%	\$22,898,000	+\$2,877,000	7.3%	\$23,637,000	+\$3,616,000	7.3%	\$8,995,000	-\$11,026,000	5.3%
Pennsylvania	\$20,765,000	8.9%	\$30,086,000	+\$9,321,000	9.7%	\$31,056,000	+\$10,291,000	9.7%	\$13,239,000	-\$7,526,000	7.8%
Rhode Island	\$3,842,000	8.2%	\$5,300,000	+\$1,458,000	8.5%	\$5,471,000	+\$1,629,000	8.5%	\$2,602,000	-\$1,240,000	7.7%
South Carolina	\$11,768,000	6.5%	\$13,835,000	+\$2,067,000	6.7%	\$14,281,000	+\$2,513,000	6.7%	\$6,802,000	-\$4,966,000	6.0%
South Dakota*	\$585,000	8.1%	\$672,000	+\$87,000	8.1%	\$693,000	+\$108,000	8.1%	\$365,000	-\$220,000	8.1%
Tennessee	\$21,266,000	8.7%	\$25,228,000	+\$3,962,000	8.7%	\$26,042,000	+\$4,776,000	8.7%	\$13,723,000	-\$7,543,000	8.7%
Texas	\$313,095,000	9.5%	\$347,623,000	+\$34,528,000	9.5%	\$358,837,000	+\$45,742,000	9.5%	\$189,137,000	-\$123,958,000	9.5%
Utah	\$18,807,000	8.4%	\$19,372,000	+\$565,000	8.5%	\$19,997,000	+\$1,190,000	8.5%	\$8,981,000	-\$9,826,000	7.2%
Vermont*	\$140,000	8.6%	\$185,000	+\$45,000	8.9%	\$191,000	+\$51,000	8.9%	\$92,000	AR2022_50152	9 8.2%

# Case 1:18-cv-00068 Document 611-1 Filed on 11/04/22 in TXSD Page 540 of 704 Appendix 1: State and Local Tax Contributions of DACA-eligible individuals

Current and potential contributions of those currently receiving or eligible for DACA status

State	Current State and Local Taxes	Current Effective Tax Rate	Taxes if All Eligible Receiving	Change if All Eligible are Receiving	New Effective Tax Rate	Taxes if All Eligible Granted Citizenship	Change if All Granted Citizenship	New Effective Tax Rate2	Taxes if DACA Protections Lost	Change if DACA Protections are Lost	New Effective Tax Rate3
Virginia	\$34,726,000	7.4%	\$50,323,000	+\$15,597,000	8.1%	\$51,946,000	+\$17,220,000	8.1%	\$22,019,000	-\$12,707,000	6.5%
Washington	\$51,272,000	10.5%	\$59,072,000	+\$7,800,000	10.5%	\$60,978,000	+\$9,706,000	10.5%	\$32,140,000	-\$19,132,000	10.5%
West Virginia*	\$283,000	8.0%	\$342,000	+\$59,000	8.2%	\$353,000	+\$70,000	8.2%	\$161,000	-\$122,000	7.1%
Wisconsin	\$17,825,000	9.4%	\$19,926,000	+\$2,101,000	9.6%	\$20,569,000	+\$2,744,000	9.6%	\$9,365,000	-\$8,460,000	8.3%
Wyoming*	\$949,000	5.3%	\$1,217,000	+\$268,000	5.3%	\$1,256,000	+\$307,000	5.3%	\$662,000	-\$287,000	5.3%
All States	\$2,026,772,000	8.9%	\$2,452,614,000	+\$425,842,000	9.0%	\$2,531,730,000	+\$504,958,000	9.0%	\$1,229,516,000	-\$797,256,000	8.3%

STATE	Estimated Population Immediately Eligible for DACA <sup>1</sup>	Estimated Population Enrolled in DACA <sup>2</sup>	Estimated Population Eligible for DACA but not Enrolled	Share of Est. Undocumented Immigrant Population <sup>3</sup>
Alabama	9,000	4,720	4,280	13%
Alaska*	2,000	170	1,830	29%
Arizona	35,000	30,180	4,820	14%
Arkansas	8,000	5,530	2,470	14%
California	379,000	237,940	141,060	13%
Colorado	23,000	18,830	4,170	14%
Connecticut	11,000	5,430	5,570	10%
Delaware	3,000	1,560	1,440	13%
Dist. of Col.*	2,000	880	1,120	7%
Florida	72,000	37,940	34,060	12%
Georgia	47,000	28,090	18,910	12%
Hawaii	2,000	660	1,340	10%

Caso 1:19 cv 00069 Document 611 1 Filed on 11/04/22 in TXSD Page 542 of 704

STATE	Estimated Population Immediately Eligible for DACA <sup>1</sup>	Estimated Population Enrolled in DACA <sup>2</sup>	Estimated Population Eligible for DACA but not Enrolled	Share of Est. Undocumented Immigrant Population <sup>3</sup>
ldaho	4,000	3,330	670	12%
Illinois	68,000	44,860	23,140	13%
Indiana	11,000	10,580	420	12%
lowa	4,000	3,050	950	11%
Kansas	8,000	7,200	800	13%
Kentucky	6,000	3,380	2,620	13%
Louisiana	5,000	2,320	2,680	8%
Maine*	200	110	90	4%
Maryland	24,000	11,110	12,890	9%
Massachusetts	19,000	9,030	9,970	11%
Michigan	10,000	7,070	2,930	10%
Minnesota	10,000	6,740	3,260	12%

STATE	Estimated Population Immediately Eligible for DACA <sup>1</sup>	Estimated Population Enrolled in DACA <sup>2</sup>	Estimated Population Eligible for DACA but not Enrolled	Share of Est. Undocumented Immigrant Population <sup>3</sup>
Mississippi	3,000	1,660	1,340	12%
Missouri	6,000	3,770	2,230	11%
Montana*	100	80	20	10%
Nebraska	4,000	3,690	310	11%
Nevada	16,000	13,910	2,090	12%
New Hampshire	600	420	190	7%
New Jersey	53,000	24,630	28,370	11%
New Mexico	10,000	7,300	2,700	15%
New York	76,000	47,170	28,830	9%
North Carolina	41,000	29,260	11,750	12%
North Dakota	200	110	90	7%
Ohio	9,000	5,060	3,940	11%

STATE	Estimated Population Immediately Eligible for DACA <sup>1</sup>	Estimated Population Enrolled in DACA <sup>2</sup>	Estimated Population Eligible for DACA but not Enrolled	Share of Est. Undocumented Immigrant Population <sup>3</sup>
Oklahoma	10,000	7,380	2,620	12%
Oregon	15,000	11,900	3,100	13%
Pennsylvania	15,000	6,700	8,300	11%
Rhode Island	3,000	1,380	1,620	10%
South Carolina	10,000	7,060	2,940	10%
South Dakota*	400	290	110	8%
Tennessee	14,000	9,180	4,820	12%
Texas	177,000	138,440	38,560	12%
Utah	11,000	10,400	600	14%
Vermont*	100	50	50	3%
Virginia	30,000	13,470	16,530	11%
Washington	27,000	19,180	7,820	12%

STATE	Estimated Population Immediately Eligible for DACA <sup>1</sup>	Estimated Population Enrolled in DACA <sup>2</sup>	Estimated Population Eligible for DACA but not Enrolled	Share of Est. Undocumented Immigrant Population <sup>3</sup>
West Virginia*	200	140	70	3%
Wisconsin	10,000	8,010	1,990	14%
Wyoming*	1,000	690	310	17%
All States	1,304,800	852,000	452,900	12%

<sup>\*</sup> DACA eligible population in these states was estimated using data on enrolled DACA participants as of September 2016. Nationwide roughly 66 percent of immigrants immediately eligible DACA are enrolled thus the assumption was made that the actual participants in those states represent 66 percent of the eligible population (rounding was used).

<sup>&</sup>lt;sup>1</sup> Batalova, Jeanne, et al. "DACA at the Two-Year Mark: A National and State Profile of Youth Eligible and Applying for Deferred Action." Migration Policy Institute, Aug. 2014, http://www.migrationpolicy.org/research/daca-two-year-mark-national-and-state-profile-youth-eligible-and-applying-deferred-action

<sup>&</sup>lt;sup>2</sup> "Deferred Action for Childhood Arrivals Process (Through Fiscal Year 2016, 4th Qtr)." United States Citizenship and Immigration Services(USCIS). Available at: https://www.uscis.gov/sites/default/files/USCIS/Resources/Reports%20and%20Studies/Immigration%20Forms%20Data/All%20Form%20Types/DACA/daca\_performancedata\_fy2016\_qtr4.pdf

<sup>&</sup>lt;sup>3</sup> Migration Policy Institute (MPI) DACA estimates divided by MPI undocumented immigrant population estimates (Migration Policy Institute (MPI) analysis of U.S. Census Bureau data from the 2010-2014 ACS pooled, and the 2008 Survey of Income and Program Participation (SIPP) by Colin Hammar and James Bachmeier of Temple University and Jennifer Van Hook of Pennsylvania State University, Population Research Institute.)

## northjersey.com

#### **NEW JERSEY**

# As Supreme Court considers end to DACA, some Dreamers are already leaving U.S. behind

Monsy Alvarado NorthJersey.com

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Born in South Korea but raised in Montclair, New Jersey, Eun Suk "Jason" Hong seemed on the cusp of another American success story when he graduated from college in 2015.

Hong, whose mother brought him to the U.S. at age 10, landed a job as a financial planner and was looking forward to starting a career.

But in 2017, President Donald Trump moved to do away with DACA, the program that allowed him to work legally in the U.S., and Hong's outlook began to change. In August, he quit his job and moved to Spain to seek a master's degree in business administration.

He's now barred for a decade from returning to the country where he grew up. But he also has left behind the anxiety of America's immigration wars.

"I wanted some certainty and control," Hong said in a recent phone interview from Madrid.
"Emotionally it was one of the scariest ideas I had to accept."

Hong is among the "Dreamers" — undocumented immigrants brought to the country as children — who are leaving their adopted home in frustration. With the U.S. Supreme Court poised to rule on DACA's future by June, some are taking matters into their own hands and moving to Europe, Mexico or Canada.

Some of those enrolled in the Deferred Action for Childhood Arrivals program have been able to gain legal status while staying in the U.S. They've applied for asylum or visas or married American citizens. But others are saying goodbye to the only country many of them know.

When Trump announced his plan to terminate the program in September 2017, there were 689,800 active DACA recipients. That has declined by more than 40,000, to 649,070, according to the latest figures on the U.S. Citizen and Immigration Services website.

Trump says the Obama-era initiative is unconstitutional, but his move to phase out the program has been blocked by legal challenges. The Supreme Court is expected to announce sometime before the end of June whether the president has the authority to end DACA.

**Immigration:** NJ immigrants from Africa worry new Trump travel policy could bar thousands from US

'The worst five days of my life': Son laments dad's final days with dementia and coronavirus

**DACA:** Democratic senators call for extended DACA, TPS protection for immigrants during pandemic

Although the federal government doesn't track how many DACA recipients have left to pursue life in another country, those who work with immigrant communities say it's becoming a more common choice as a Supreme Court dominated by a conservative majority moves closer to a decision.

"It has been an option people are taking into consideration, more and more," said Daniel Arenas, 30, who moved back to Mexico from South Carolina in 2011 and later co-founded Dream in Mexico, an organization that helps those who have chosen to return after growing up in the United States. Arenas, who emigrated from Mexico when he was 4 years old, now travels back and forth between the two countries for work.

"We have talked to people who said they are living in states where they can't go to college," he said. "Seems like even though they have DACA, some say it's not helping them accomplish their life's goals."

Francesc Ortega, a professor of economics at the City University of New York's Queen College, said the country has invested in educating DACA recipients, and now when some are ready to contribute to the economy they are forced to leave because of the barriers imposed. Ortega, whose work was published in 2016 by the National Bureau of Economic Research, estimated that each undocumented worker contributes around \$70,000 to the U.S. economy each year.

Each currently employed DACA recipient who leaves the country will cost the national GDP that amount, Ortega said. If they lose DACA's protections but stay in the U.S. as illegal workers, their economic contribution would be reduced by \$7,000, he said.

## 'Triumph for the rule of law'

Supporters of policies to limit immigration say undocumented immigrants cost taxpayers money, pointing to research that shows they consume more in public services than they pay for with taxes.

"Fewer than 50 percent of DACA beneficiaries have a high school diploma. An even smaller number have a college education," said Matt O'Brien, director of research for the Federation for American Immigration Reform, citing the group's own studies. "And only a tiny proportion have professional qualifications or other highly marketable skills. So it's far from clear that any of the so-called 'Dreamers' have exerted any positive effect on the U.S. economy as a result of their education or job training."

A majority of Dreamers occupy entry-level or low-wage jobs in construction, food service and maintenance industries, and that means they are in direct competition with "economically vulnerable Americans," he said.

"The departure of 'Dreamers' from the United States should be considered both an economic good and triumph for the rule of law," O'Brien said.

President Barack Obama created DACA through executive action in 2012. Applicants had to pass criminal background checks to obtain two-year, renewable work permits and a Social Security card. In some states, including New Jersey, that also opened the door for recipients to obtain driver's licenses.

For the first time, they were able to legally work and make money to pay for college educations and contribute to household expenses.

## **Moving out**

Rodrigo Diaz, 28, was born in Mexico but moved to California when he was 3 years old. He applied for DACA in 2012, a few months after the program began. The new status allowed him to go to college part-time near his home in Montclair, California. He got a job as a sales associate at a Best Buy store and contributed to household finances.

But in 2016, as Trump was gaining momentum on the campaign trail and vowing to curb illegal immigration, Diaz, his parents and his sister moved back to Mexico. They had been talking about returning for some time to reunite with family, but Trump helped them make the decision, Diaz said

"I felt I can either let this man, who doesn't know who I am, decide my fate and decide whether I can stay or go in a country I have known my whole life, or I can take the decision back and move back to my country of birth," he said.

Though DACA allowed him to study and work, it still placed limits on him, he said.

"It wasn't a path to citizenship. It wasn't a path to anything. It was sort of like a dead-end road," he said. "I wanted more."

The day Diaz and his family left, they woke up in a nearly empty apartment and said their goodbyes to family and friends before heading south. After crossing the border and arriving in Tijuana, with the United States behind him and Mexico in front, a sense of disorientation set in, he said.

"Everything I ever knew was California," recalled Diaz, who had never strayed far from the Golden State for fear of deportation. "Once you cross over, the architecture changes. There was a lot of colors, a lot of stuff was happening. It was a little intense."

Diaz now works in marketing for a footwear company. He keeps up with the latest news concerning DACA and feels relief that he no longer has to worry about the Supreme Court's outcome, not to mention the \$495-a-year fee to renew his DACA status.

"Having the burden on my shoulders of what is going to happen with me ... I don't have to think about that anymore," he said.

## 'Dream accomplished' — in Mexico

Yovany Diaz Tolentino, 28, was raised in Georgia but now lives in San Miguel, Mexico. He received a certification this year to teach English as a foreign language from the University of Dayton in Ohio after taking classes long distance.

"Dream accomplished," he said. "I will now have a career, and now I don't have to migrate or look for better opportunities."

Diaz Tolentino, who returned in 2015, went back even though family and friends advised him to stay in the U.S. He said life wasn't easy in Georgia, where he worked as a manager at a McDonald's but had no prospects of going to college. Georgia does not allow undocumented immigrants to enroll in top colleges and receive in-state tuition.

In Mexico, he works in a restaurant and thinks about using his talents to help others in the future.

"Now, I am dreaming about being the best teacher in Mexico," he said.

Hong, the New Jersey émigré, recently completed an MBA degree from the IE Business School in Madrid, and started classes for a master's in business analytics and data. He wants to launch a financial tech startup in Spain.

He would like to return to the United States one day, but is also looking to move to Canada, which has attracted more DACA recipients in recent years.

"We are good, bright young individuals who are hungry for success," he said. "All we wanted is an opportunity, and right now we are taking that opportunity in our own hands. And it's the country's loss because they couldn't provide it for us."

### Time to leave?

It's a decision that Itzel Hernandez, 26, of Red Bank, New Jersey, has pondered, too. A community organizer for the American Friends Service Committee, she was born in Mexico but moved north when she was 10. Now, she's thinking about pursuing a master's degree, possibly in Germany, where it's more affordable.

Hernandez graduated from New Jersey City University in Jersey City in 2017 with a dual degree in political science and national security studies. She had hoped to work in counterterrorism with the FBI, but being undocumented prevents her from working for the agency, she said.

"It's a very personal thing to have to choose," she said. "In all ways, you feel and you consider yourself an American, so it feels like you are being kicked out of your own home, and not by choice. I don't want to give up on the idea that this is going to get better ... but what you see and what you hear doesn't always match up with what is going on at the federal level."

Monsy Alvarado is the immigration reporter for NorthJersey.com. To get unlimited access to the latest news about one of the hottest issues in our state and country, please subscribe or activate your digital account today.

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# The Economic and Fiscal Consequences of **Immigration**

Panel on the Economic and Fiscal Consequences of Immigration

Francine D. Blau and Christopher Mackie, Editors

Committee on National Statistics

Division of Behavioral and Social Sciences and Education

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## ase 1:18-cv-00068 Document 611-1 Filed on 11/04/22 in TXSD Page 554 of 7

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The panel thanks the following individuals who attended open meetings and generously gave of their time to present material to inform the panel's deliberations. Ronald Lee (University of California, Berkeley) reviewed methods for producing intergenerational population and fiscal impact projections. Gordon Hanson (University of California, San Diego) discussed the role of immigrants in innovation. Ian Preston (University College London) gave a presentation about immigration and public finances in the United Kingdom. Alan Auerbach (University of California, Berkeley) shared his deep expertise on tax and fiscal policy and on intergenerational estimates of fiscal impacts. Matthew Hall (Cornell University) described his research on interstate migration and the assimilation of U.S. immigrants. Brian Cadena (University of Colorado Boulder) described how immigrants affected the spatial allocation of labor across localized markets during the Great Recession. Audrey Singer (Brookings Institution) discussed the comparative skill and educational profiles of immigrants and the native-born in the United States, as well as policy and public responses to immigration. David Card (Univiii

ase 1:18-cv-00068 Document 611-1 Filed on 11/04/22 in TXSD Page 559 of 7

ACKNOWLEDGMENTS

versity of California, Berkeley) engaged the panel on a wide range of labor market topics, including wage impacts and employment effects across skill and other groups, and on variation in the capacity of industries to absorb immigrants. Ethan Lewis (Dartmouth College) presented on immigrant and native substitutability in the labor market and on the impact of immigration on production technology and economic growth. Ted Mouw (University of North Carolina) discussed evidence from the U.S. Census Bureau's Longitudinal Employer-Household Dynamics on worker displacement in highimmigration industries. Rob Fairlie (University of California, Santa Cruz) described findings from his research on the impact of immigrants on entrepreneurship and job creation. Magnus Lofstrom (Public Policy Institute of California) likewise discussed entrepreneurship and job creation and the role of state policies affecting these processes. Sarah Bohn (Public Policy Institute of California) discussed the role of immigrants in informal labor markets in California. Annette Bernhardt (University of California, Berkeley) presented on how unauthorized status plays out in the workplace—its correlation with higher rates of unemployment and labor law violations, and how current immigration policy shapes the bargaining between employers and undocumented workers. Laura Hill (Public Policy Institute of California), with input from Hans Johnson (Public Policy Institute of California), provided an overview of state and local policy issues affected by immigration in California, and of methods using administrative IRS data and indirect survey methods for measuring the extent of unregulated/unauthorized work. Nancy Folbre (University of Massachusetts Amherst) provided information to the panel about immigration and nonmarket and care work. Giovanni Peri (University of California, Davis) presented on labor market issues ranging from the role of immigrants in stimulating local labor markets to the impact of foreign science, technology, engineering, and mathematics workers on native wages and employment in U.S. cities. Dan Lichter (Cornell University) discussed Hispanic boomtowns and how immigration affects population change and racial diversity in rural America. Klaus Zimmermann (University of Bonn) presented evidence to the panel on the economic and fiscal impacts of circular migration. Lynn Karoly and Francisco Perez-Arce (RAND Corporation) presented a framework for benefit-cost analyses of state-specific immigration policies (e.g., in-state tuition, e-verify, driver's licensing, etc.). These presentations stimulated extensive discussion of the issues covered in this report.

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x

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> Francine D. Blau, Chair Panel on the Economic and Fiscal Consequences of Immigration

Summary

1

## Contents

		PART I: BACKGROUND AND CONTEXT	
1	Introduction		
	1.1	Context and Motivation, 17	
	1.2	Economic Impacts, 24	
	1.3	Fiscal Impacts, 26	
	1.4	Charge to the Panel, 30	
2	Imm	igration to the United States: Current Trends in Historical	
	Perspective		
	2.1	Introduction, 33	
	2.2	Immigration Trends and Origins from 1820 to 2015, 35	
	2.3	Immigration Driven by Labor Demand, 45	
	2.4	The Net International Migration Rate and Its	
		Contribution to Population Growth, 46	
	2.5	Past and Future Trends in the Stock of First and Second	
		Generation Immigrant Populations, 51	
	2.6	Immigration and Changes in Race and Ethnic	
		Composition, 56	
	2.7	Population Aging, the Baby Boom, and the Transition to an	
		Immigrant Workforce, 62	

xi

TENTS
85
36
165
407
197
5

#### R2U22\_5U155

#### 501554

xiv		CONTI	ENTS
	9.8 9.9	Net Effects of Immigration on State and Local Budgets, 525 Alternative Treatments of Education Costs, 536 Marginal Versus Average Fixed Costs, 537 Conclusions, 541 Technical Annex: Supplemental Tables, 544	
10	10.1 10.2 10.3	Counting and Characterizing Immigrants and Their Descendants, 568 Information on Legal Status, 571 Measurement of Immigration and Emigration Patterns, 574 Exploiting Multiple Data Sources, 575	567
Ref	erence	es	581
App	pendix Biogi	raphical Sketches	607

## Tables, Figures, and Boxes

#### **TABLES**

- 2-1 Persons Obtaining Lawful Permanent Resident Status by Region and Selected Country of Last Residence, Fiscal 1820-2013 (percentage of total), 38 2-2 Components of Population Growth: United States, by Decade,
- 1790-2000, and by Year, 2000-2013, 48 2-3 Racial and Ethnic Diversity by Immigrant Generation, United
- States, 1900, 1970, 2000, 2010, and 2014, 57 2-4 Population Aging in Projections That Include or Exclude
- Immigration, 66 2-5 Decadal Change in U.S. Working-age Population, Ages 25-64, by
- Immigrant Generation, from 1960-1970 to 2020-2030, Based on Population Estimates and Projections, 68
- 2-6 New Immigrant Arrivals by State of Current Residence: 1980, 1990, 2000, 2008, 2010, and 2014, 74
- 3-1 Share of Male Workers, Ages 25-64, Who Were Born Abroad, by Major Occupational Category, by Decennial Census Year 1970-2000, and in 2012, 96
- 3-2 Share of Female Workers, Ages 25-64, Who Were Born Abroad, by Major Occupational Category, by Decennial Census Year 1970-2000, and in 2012, 97

ase 1:18-cv-00068 Document 611-1 Filed on 11/04/22 in TXSD Page 567 of 70  $^{\circ}$ 

2000, and in 2012, 98

xvi

3-3

3-4

Segregation Index of U.S.-born and Foreign-born Workers, Ages 25-64, Across 41 Occupations, by Decennial Census Year 1970-

Mean Share of Weeks Worked by Foreign-born and Native-born

TABLES, FIGURES, AND BOXES

- Men, by Decennial Census Year 1970-2000, and in 2012, Ages 25-64, 99
  - 3-5 Mean Share of Weeks Worked by Foreign-born and Native-born Women, by Decennial Census Year 1970-2000, and in 2012, Ages 25-64, 100
  - 3-6 Mean Share of Weeks Worked by Foreign-born and Native-born Men, by Decennial Census Year 1970-2000, and in 2012, Ages 25-54, 101
  - 3-7 Mean Share of Weeks Worked by Foreign-born and Native-born Women, by Decennial Census Year 1970-2000, and in 2012, Ages 25-54, 101 Difference in Share of Weeks Worked for Immigrant Cohorts, 3-8
  - Relative to Native-born Cohort, by Census Period, Men, Ages Difference in Share of Weeks Worked for Immigrant Cohorts, 3-9
  - Relative to Native-born Cohort, by Census Period, Women, Ages 25-64, 103 3-10 Average Hourly Wages and Earnings of Employed Foreign-born

and Native-born Men, by Decennial Census Year 1970-2000, and

Average Hourly Wages and Earnings of Employed Foreign-born and Native-born Women, by Decennial Census Year 1970-2000, and in 2012, Ages 25-64, in 2012 Dollars, 108

in 2012, Ages 25-64, in 2012 Dollars, 106

- Weekly Wage Assimilation of Male Immigrants, by Cohort 3-12 (percentage difference between native-born and foreign-born
- wages), 110
- 3-13 Weekly Wage Assimilation of Female Immigrants, by Cohort (percentage difference between native-born and foreign-born wages), 111
- 3-14 Percentage of Immigrants and Their Children in Poverty and Near
- Poverty, by Source Country and World Region of Birth, 2011, 120 3-15 Welfare Use of Households with Children, by State, Current Population Survey 2011-2013 (in percentage), 126
  - Educational Attainment of Male Immigrants, Ages 25 and Older, 3-16 by Decennial Census Year 1970-2000, and in 2012, 136
  - 3-17 Educational Attainment of Female Immigrants, Ages 25 and Older, by Decennial Census Year 1970-2000, and in 2012, 136

for Age (cubic) Only, 146

## Share of Foreign-born Male Workers (percentage), Ages 25-64, by

TABLES, FIGURES, AND BOXES

 $x\nu ii$ 

Occupational Category, by Decennial Census Year 1970-2000, and in 2012, 137

3-19 Share of Foreign-born Female Workers (percentage), Ages 25-64, by Occupational Category, by Decennial Census Year 1970-2000, and in 2012, 140 Difference in Share of Weeks Worked for Immigrant Cohorts, by 3-20

Decennial Census Year 1970-2000, and in 2012, Men, Ages 25-64, Controlling for Age (cubic) Only, 142 3-21 Difference in Share of Weeks Worked for Immigrant Cohorts, by

Decennial Census Year 1970-2000, and in 2012, Men, Ages 25-64, Controlling for Age (cubic) and Years of Education, 143 3-22 Difference in Share of Weeks Worked for Immigrant Cohorts, by

Decennial Census Year 1970-2000, and in 2012, Women, Ages 25-64, Controlling for Age (cubic) Only, 144 Difference in Share of Weeks Worked for Immigrant Cohorts, by Decennial Census Year 1970-2000, and in 2012, Women, Ages 25-64, Controlling for Age (cubic) and Years of Education, 145 Age-adjusted Relative Weekly Earnings of Immigrant Cohorts, by 3-24 Decennial Census Year 1970-2000, Men, Ages 25-64, Controlling

Age- and Education-adjusted Relative Weekly Earnings of 3-25 Immigrant Cohorts, by Decennial Census Year 1970-2000, and in 2012, Men, Ages 25-64, Controlling for Age (cubic) and Years of Education, 147

Age-adjusted Relative Weekly Earnings of Immigrant Cohorts, by 3-26 Decennial Census Year 1970-2000, and in 2012, Women, Ages 25-64, Controlling for Age (cubic) Only, 148 Age- and Education-adjusted Relative Weekly Earnings of 3-27

Immigrant Cohorts, by Decennial Census Year 1970-2000, and in 2012, Women, Ages 25-64, Controlling for Age (cubic) and Years of Education, 149 Age-adjusted Probabilities of Speaking English Very Well, 3-28 Immigrant Cohorts, by Decennial Census Year 1980-2000, and in

2012, Men, Ages 25-64, Controlling for Age (cubic) Only, 150 Age-adjusted Probabilities of Speaking English Very Well, 3-29 Immigrant Cohorts, by Decennial Census Year 1980-2000, and in 2012, Women, Ages 25-64, Controlling for Age (cubic) Only, 151

Age-adjusted Probabilities of Speaking English Well, Immigrant 3-30 Cohorts, by Decennial Census Year 1980-2000, and in 2012, Men, Ages 25-64, Controlling for Age (cubic) Only, 152

ase 1:18-cv-00068 Document 611-1 Filed on 11/04/22 in TXSD Page 569 of 7 $^\circ$ 

 $x\nu iii$ 

3-31

7-2

Age-adjusted Probabilities of Speaking English Well, Immigrant

TABLES, FIGURES, AND BOXES

5-1 Simulated Percentage for Wage Impacts of 1990-2010 Immigrant Supply Shock, 236

Cohorts, by Decennial Census Year 1980-2000, and in 2012, Women, Ages 25-64, Controlling for Age (cubic) Only, 153

- Effect on Native Wages of an Inflow of Immigrants That Increases 5-2 Labor Supply by 1 Percent, 242
- Recent Studies Using Cross-Area, Occupation, or Industry 5-3
- Approaches, 270 6-1 Educational Attainment as of 2012 of the Foreign-born Population
- 6-2 Educational Attainment as of 2012 of the U.S. Foreign-born and Native-born Populations (in thousands), Ages 25 and Older, by World Region of Birth, 308

(in thousands), Ages 25 and Older, by Year of Entry, 308

- 6-3 Mean Years of Schooling of U.S.-born Versus All and Recent Foreign-born Immigrant Populations by World Region of Birth, 310
- 7-1 Domains and Types of Impacts of Immigration That Affect Fiscal Balances, 329
- Immigrants for In-State Tuition, 343 8-1 Net per Capita Fiscal Impacts, in 1994 and 2013, of First

Generation Immigrants and Their Dependents, Second Generation

Multiple Impacts of Granting Eligibility to Undocumented

- Native-born Independent Individuals and Their Dependents, and Third-plus Generation Native-born Independent Individuals and Their Dependents, by Level of Government, 389 Net per Capita Fiscal Impacts of First, Second, and Third-plus 8-2
- Generation Groups (each with dependents) in 2013, by Scenario
- and Level of Government, 394 Regression Analysis of Net Fiscal Impacts (in dollars per person) 8-3

of First and Second Generation Groups Relative to Third-plus

- Generation Group, 1994-2013, by Level of Government, 399 Average Annual Growth in Per Capita Flows, 2012-2087 (under 8-4
  - three scenarios, in percentage), 412 8-5 Educational Distribution by Generation, Ages 25 and Older, for
- Recent (past 5 years) and All Immigrants, 415 8-6 Age Distribution by Generation, 1994-1996 and 2011-2013, 419

## TABLES, FIGURES, AND BOXES

are in thousands of 2012 dollars), 430

xix

Average per Person Benefits Received, by Age Group and 8-7

- Generational Group, 1995 and 2010 (in thousands of 2012 dollars), 424 8-8 Predicted Educational Distribution of U.S.-born Children of a
- Foreign-born Parent, Percentages of Parental Offspring Expected to Be in an Educational Category (rows add to 100), 425 Predicted Educational Distribution of U.S.-born Children of a U.S.-8-9
- born Parent, Percentages of Parental Offspring Expected to Be in an Educational Category (rows add to 100), 425 8-10 Observed and Projected Educational Distribution for Immigrants, Ages 20-30, Who Arrived in the United States in the Past 5 Years
- and Their Descendants, 427 8-11 Demographic Indicators Used in Fiscal Impact Calculations, 429 8-12 75-year Net Present Value Flows for Consolidated Federal, State, and Local Governments for Two Future Budget Scenarios, by Education and Age of Arrival, Varying the Treatment of Public

Goods and Characteristics of an Average Immigrant (fiscal impacts

- 75-year Net Present Value Flows Comparing an Immigrant 8-13 Arriving at Age 25 with a Native-born Person Followed from Age 25, for Consolidated Government Finances under Two Future Budget Scenarios, by Educational Attainment, Varying the Treatment of Public Goods (in thousands of 2012 dollars), 440 75-year Present Value Flows for Consolidated Federal, State, 8-14 and Local Governments for Three Future Budget Scenarios,
- with Public Goods Excluded from Incremental Benefit Costs to Immigrants and Descendants (flows in thousands of 2012 dollars), 445 75-year Present Value Flows for Federal Government Only, for 8-15 Three Future Budget Scenarios, by Grouped Ages of Immigrant

by Grouped Ages of Immigrant Arrival in the United States,

- Arrival in the United States, with Public Goods Excluded from Incremental Benefit Costs to Immigrants and Descendants (flows in thousands of 2012 dollars), 448
- 75-year Present Value Flows for State and Local Governments 8-16 only, for Three Future Budget Scenarios, by Grouped Ages of Immigrant Arrival in the United States, with Public Goods Excluded from Incremental Benefit Costs to Immigrants and Descendants (flows in thousands of 2012 dollars), 451

of 2012 dollars), 457

2011-2013, 520

2011-2013, 532

xx

8-17

8-18

9-1

9-6

9-7

9-8

9-9

9-10

TABLES, FIGURES, AND BOXES

75-year Present Value Flows for Consolidated Federal, State,

and Local Governments for Three Future Budget Scenarios, by Grouped Ages of Immigrant Arrival in the United States, with Public Goods (defense, federal subsidies, and rest-of-world payments) Included in Incremental Benefit Costs to Immigrants and Descendants (flows in thousands of 2012 dollars), 454 75-year Present Value Flows for Federal Governments Only, for

Three Future Budget Scenarios, by Grouped Ages of Immigrant Arrival in the United States, with Public Goods (defense, federal subsidies, and rest-of-world payments) Included in Incremental Benefit Costs to Immigrants and Descendants (flows in thousands

Percentage Foreign-born Population by State, 2011-2013 and

2000, in Order from Highest to Lowest Percentage Foreign-born in 2011-2013, 506
9-2 Percentage Independent Persons by Immigrant Generation, by State, 2011-2013, in Order from Highest to Lowest Percentage (first generation independent persons), 508
9-3 Average Age and Percentage, Ages 65 and Older, Independent Persons by Immigrant Generation by State, 2011-2013, 512
9-4 State and Local Revenues per Independent Person Unit (rounded to nearest \$50), by Immigrant Generation by State, 2011-2013, 518
9-5 State and Local Expenditures per Independent Person Unit

(rounded to nearest \$50), by Immigrant Generation by State,

Expenditures per Independent Person Unit (rounded to nearest \$50), by Immigrant Generation by State, 2011-2013, 523

Expenditures per Household Unit (rounded to nearest \$50), by

Regression Analysis of Net Fiscal Impact at the State and Local

Level per Independent Person Unit, by Immigrant Generation,

Net Difference between State and Local Revenues and

Net Difference between State and Local Revenues and

Net Difference between State and Local Revenues and Expenditures per Independent Person Unit with Alternative Assignment of Education Expenditures (rounded to nearest \$50),

Net Difference between State and Local Revenues and Expenditures per Independent Person Unit with a Marginal Allocation of Fixed Revenues and Expenditures (rounded to nearest \$50), by Immigrant Generation by State, 2011-2013, 542

Immigrant Generation by State, 2011-2013, 529

by Immigrant Generation, 2011-2013, 538

- AR2022\_501561
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xxi

Census of Governments (COG) State and Local Revenue Flow 9-11 Types and Allocation Methods, 545

TABLES, FIGURES, AND BOXES

Census of Governments (COG) State and Local Expenditure Flow

9-12 Types and Allocation Methods, 547 9-13 Annualized Weighted Sample Cases of Independent Persons by Immigrant Generation by State, Current Population Survey Annual

Social and Economic Supplement for 2011-2013, 549 9-14 Sum of Unweighted Sample Cases of Independent Persons by Immigrant Generation by State, Current Population Survey Annual Social and Economic Supplement for 2011-2013 Total, 551

Average Number of Children (dependents) per Independent Person 9-15 Unit, by Immigrant Generation by State, 2011-2013, 553

9-16 Average Adjusted Gross Income (AGI) per Independent Person Unit (rounded to nearest \$50), by Immigrant Generation by State, 2011-2013, 555

Percentage with Less Than a High School Degree (<HS) and More Than a Bachelor's Degree (>BA), Independent Persons by Immigrant Generation by State, 2011-2013, 557 Net Difference between State and Local Revenues and 9-18 Expenditures per Independent Person Unit (rounded to nearest

Average Household Size per Household Unit, by Immigrant 9-19 Generation by State, 2011-2013, 563 Annualized Weighted Sample Cases of Households by Immigrant 9-20 Generation by State, Current Population Survey Annual Social and Economic Supplement for 2011-2013, 565

2-5

Generation by State, 2011-2013, 560

#### **FIGURES**

\$50), Including Coefficient of Variation Below, by Immigrant

- 2-1 Legal immigration to the United States, 1820-2012, 36 2-2 Percentage of first and second generations in the U.S. population,
- 1850-2030, 53 Change in age composition of U.S. population from 1960-2030 2-3
- (projected), 63
- 2-4 Rising senior ratio in the U.S. population, with and without projected immigration, 65
  - generation (in millions), 1960-1970 to 2020-2030, 68 3-1 Educational attainment of recent immigrants (those who entered

Net change in working-age population each decade, by immigrant

in the 5 years prior), by Decennial Census year 1970-2000, and in 2012 (in percentages), 88

xxii

3-8

ase 1:18-cv-00068 Document 611-1 Filed on 11/04/22 in TXSD Page 573 of 7 $^\circ$ 

3-2 Mean years of educational attainment of U.S.-born and recent

TABLES, FIGURES, AND BOXES

3-3 Mean years of educational attainment of recent immigrants, (those who entered in the 5 years prior), by Decennial Census year, 1970-2000, and in 2012, by country/region of birth, 90

Census year, 1970-2000, and in 2012, 89

Age and educational attainment of foreign-born residents, 1970 3-4 and 2012, 91

immigrants (those who entered in the 5 years prior), by Decennial

- 3-5 Age and educational attainment of U.S.-born residents, 1970 and 2012, 92
- Aging profile for high English-language proficiency of male 3-6 immigrants (wage earners), by arrival cohort, 115
- 3-7 Aging profile for high English-language proficiency of female immigrants (wage earners), by arrival cohort, 116
- immigrants (wage earners), by arrival cohort, 117 3-9 Aging profile for moderate English-language proficiency of female immigrants (wage earners), by arrival cohort, 118

Aging profile for moderate English-language proficiency of male

- 3-10 Poverty rates for all U.S. residents, natives, and immigrants, 1970-2010, 122 Safety net participation as fraction of households (Y axis) with
- 3-11 incomes less than 200 percent of the federal poverty level, 131 3-12 Trends in poverty rate of children, 1994-2009, 132 3-13 Trends in program participation of children, 1994-2009, 133
- 4-1 Labor market (with inelastic labor supply) response to an influx of immigrant workers, 167
- 4-2 Capital market (with inelastic labor supply) response to an influx of immigrant workers, 169
- 4-3 Labor market (with elastic labor supply) response to an influx of immigrant workers, 176
- 4-4 Capital market (with elastic labor supply) response to an influx of
- immigrant workers, 177 4-5 Low-skilled labor market response to an influx of low-skilled
- immigrant workers, 179 4-6 High-skilled labor market response to an influx of low-skilled
  - immigrant workers, 179 4-7 Capital market response to an influx of low-skilled immigrant
- workers, 180 4-8 High-skilled labor market response to an influx of high-skilled
- immigrant workers, 184 Low-skilled labor market response to an influx of high-skilled 4-9 immigrant workers, 185

4-10

TABLES, FIGURES, AND BOXES

xxiii

Capital market response to an influx of high-skilled immigrant workers, 185

The allocations of capital and labor in a two-good economy, 4-11 before and after immigration, 188 High-skilled labor market response to an influx of high-skilled 4-12

immigrant workers (with long-run technological change), 192

5-1 Predicted and actual position of recent immigrants (less than 2 years in the United States) in the wage distribution, 209 5-2 Scatter between male wages and male immigration across skill groups, 227

5-3 Self-employment rates by nativity, 2000-2012, 262 7-1 Age-specific taxes and benefits, by immigrant generation, United

States, 2012, 325 The U.S. population by age and immigrant status in 1995, 367 8-1

8-2 The U.S. population by age and immigrant status in 2011, 368 Average number of own children in household, by immigrant 8-3 generation, 2013, 370 8-4 Average years of education across age by immigrant generation in

1994, 371 8-5 Average years of education across age by immigrant generation in 2013, 372 8-6 Employment-to-population ratio across age by immigrant

generation in 1994, 373 8-7 Employment-to-population ratio across age by immigrant generation in 2013, 374

8-8 Wage and salary income in 2012 dollars by immigrant generation in 1995, 375

8-9 Wage and salary income in 2012 dollars by immigrant generation in 2012, 376

Fiscal flows, first generation immigrants to the United States, 8-10 2012, 378

Total taxes paid per capita in 1995 at all levels of government, by 8-11 age and immigrant generation, 379 Total taxes paid per capita in 2012 at all levels of government, by 8-12

age and immigrant generation, 380 8-13 Total per capita benefits received in 1995 at all levels of

government, by age and by immigrant generation, 381 8-14 Total per capita benefits received in 2012 at all levels of government, by age and by immigrant generation, 382

xxiv

8-15

TABLES, FIGURES, AND BOXES

Federal old-age benefits received per capita in 2012, by age and

- immigrant generation, 383 Federal means-tested antipoverty benefits received per capita in 8-16
  - 2012, by age and immigrant generation, 384
  - 8-17 Net fiscal impact in 1995, per capita, including all levels of
  - government, by age and immigrant generation, 385 Net fiscal impact in 2012, per capita, including all levels of 8-18
  - government, by age and immigrant generation, 386 8-19 Ratio of receipts to outlays for first generation and native-born

groups as defined for Table 8-1, 392

- 8-20 Age profiles of wage and salary income by educational attainment and nativity, 2012, 420
- 8-21 Age profiles of net fiscal impact by educational attainment and nativity, 2012, 421
- 8-22 Average taxes paid by immigrants, ages 25-64, by education
- group, relative to educational attainment of less than high school, 423
- Net fiscal impacts of immigration, by budget scenario, treatment of 8-23 public goods, and average characteristics of new immigrants, 437
- Predicted educational attainment for native-born children, 490 8-24 8-25 Predicted educational attainment for foreign-born children, 490

#### BOXES

- 1-1 Statement of Task, 31
- 2-1 Sources of Data on Measuring First and Second Generation Stocks, 52
- 6-1 Remittances, 290
- 8-1 Alternative Scenarios for Attributing Public Expenditures to
- Immigrants and Natives, 364 8-2 Definitions of Dependent and Independent Persons, 377
- 9-1 Definitions of Independent and Dependent Persons, 500

## Summary

More than 40 million people living in the United States were born in other countries, and almost an equal number have at least one foreign-born parent. Together, the first generation (foreign-born) and second generation (children of the foreign-born) comprise almost one in four Americans. It comes as little surprise, then, that many U.S. residents view immigration as a major policy issue facing the nation. Not only does immigration affect the environment in which everyone lives, learns, and works, but it also interacts with nearly every policy area of concern, from jobs and the economy, education, and health care, to federal, state, and local government budgets.

Although this report focuses on the United States, the rise in the share of foreign-born populations is an international phenomenon among developed countries. And, given disparities in economic opportunities and labor force demographics that persist across regions of the world, immigration is an issue that will likely endure. Recent refugee crises further highlight the complexity of immigration and add to the urgency of understanding the resultant economic and societal impacts.

One set of headline questions concerns the economy, specifically jobs and wages: To what extent do the skills brought to market by immigrants complement those of native-born workers, thereby improving their prospects; and to what extent do immigrants displace native workers in the

<sup>&</sup>lt;sup>1</sup>The United States is about in the middle of the range for OECD countries in terms of the percentage of its population that is foreign born.

#### 2 THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

labor market or lower their wages?<sup>2</sup> How does immigration contribute to vibrancy in construction, agriculture, high tech, and other sectors? What is the role of immigration in driving productivity gains and long-term economic growth?

Other questions arise about taxes and public spending: What are the fiscal impacts of immigration on state, local, and federal governments—do immigrants cost more than they contribute in taxes? How do impacts change when traced over the life cycle of immigrants and their children? How does their impact on public finances compare with that of the nativeborn population? To what extent is the sustainability of programs such as Social Security and Medicare affected by immigration and immigration policy?

The Panel on the Economic and Fiscal Consequences of Immigration was convened by the National Academies of Sciences, Engineering, and Medicine through its Committee on National Statistics to distill findings on these complex questions in a way that advances the conversation and improves understanding of these important topics.<sup>3</sup> Support for the study was provided by the John D. and Catherine T. MacArthur Foundation and the National Academies' presidents.

#### **IMMIGRANTS AND THEIR CHARACTERISTICS**

Key developments have occurred over the two decades since the last major report on this topic from the National Research Council (1997), The New Americans: Economic, Demographic, and Fiscal Effects of Immigration:

- The number of immigrants living in the United States increased by more than 70 percent—from 24.5 million (about 9% of the population) in 1995 to 42.3 million (about 13% of the population) in 2014; the native-born population increased by about 20 percent during the same period.
- Annual flows of lawful permanent residents have increased. During the 1980s, just under 600,000 immigrants were admitted legally (received green cards) each year; after the 1990 Immigration Act took effect, legal admissions increased to just under 800,000 per

<sup>&</sup>lt;sup>2</sup>This report uses the term "immigrant" synonymously with the term "foreign-born." This follows common practice of referring to the foreign-born population counted in a census or estimated by a survey as "immigrants," even though technically this population often includes foreign students, temporary workers on H-1B and other visas, and migrants who entered the country surreptitiously or overstayed legal visas.

<sup>&</sup>lt;sup>3</sup>The full text of the panel's charge is reproduced in Chapter 1.

- year; since 2001, legal admissions have averaged just over 1 million per year.
  Estimates of the number of unauthorized immigrants in the United
- States roughly doubled from about 5.7 million in 1995 to about 11.1 million in 2014. Gross inflows, which had reached more than 800,000 annually by the first 5 years of the 21st century, decreased dramatically after 2007; partly as a result, the unauthorized immigrant population shrank by about 1 million over the next 2 years. Since 2009, the unauthorized immigrant population has remained essentially constant, with 300,000-400,000 new unauthorized immigrants arriving each year and about the same number leaving.
- The foreign-born population has changed from being relatively old to being relatively young. In 1970, the peak concentration of immigrants was in their 60s; in 2012, the peak was in their 40s.
- Educational attainment has increased steadily over recent decades for both recent immigrants and natives, although the former still have about 0.8 years less of schooling on average than do the latter. Such averages, however, obscure that the foreign-born are overrepresented both among those with less than a high school education and among those with more than a 4-year college education, particularly among computer, science, and engineering workers with advanced degrees. The foreign- and native-born populations have roughly the same share of college graduates.
- As time spent in the United States lengthens, immigrants' wages increase relative to those of natives and the initial wage gap narrows. However, this process of economic integration appears to have slowed somewhat in recent decades; the rate of relative wage growth and English-language acquisition among the foreign-born is now slightly slower than it was for earlier immigrant waves. The children of immigrants continue to pick up English-language skills very quickly.
- Geographic settlement patterns have changed since the 1990s, with immigrants increasingly moving to states and communities that historically had few immigrants. Nonetheless, the majority of the foreign-born population continues to reside in large metropolitan centers in traditional gateway states.

### Macroeconomic conditions have also changed:

• The New Americans was released during a prolonged period of economic expansion; annual real gross domestic product (GDP) growth was between 2.7 and 4.8 percent in 1992-2000. Since then, the nation has experienced a dot-com bust recession, followed by a

# 4 THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

- largely jobless recovery, a housing boom, the Great Recession, and another long, slow recovery.
- The nation's total public debt, which, in addition to federal government debt, includes state and local debt, was about 63 percent of GDP in 1997. After declining to about 54 percent in 2001, it increased to 100 percent by the end of 2012. In 2016, total public debt remains over 100 percent of GDP. The increases of the past decade have occurred largely as a result of, and in response to, the Great Recession.
- Civilian labor force growth has slowed, from around 1.2 percent annually in the 1990s, to 0.7 percent in the 2000s, to a projected 0.5 percent this decade, reflecting current demographics such as aging Baby Boomers and more young people going to college.
- The portion of the labor force that is foreign born has risen from about 11 percent to just over 16 percent in the past 20 years. Immigrants and their children will account for the vast majority of current and future net workforce growth—which, at less than 1 percent annually, is slow by historical standards.

### LABOR MARKET AND OTHER ECONOMIC IMPACTS

Economic theory provides insights into the mechanisms whereby immigration may impact wages and employment in a receiving country. By increasing the supply of labor, an episode of immigration is predicted to reduce the wages of workers already in the labor market who are most similar to the new arrivals; the incomes of others may increase, either because immigrants' skills complement their own or because the returns on capital increase as a result of changes to the labor force. The mix of skills possessed by arriving immigrants—whether manual laborers, professionals, entrepreneurs, or refugees—will influence the magnitude and even the direction of wage and employment impacts.

Given the potential for multiple, differentiated, and sometimes simultaneous effects, economic theory alone is not capable of producing definitive answers about the net impacts of immigration on labor markets over specific periods or episodes. Empirical investigation is needed. But wage and employment impacts created by flows of foreign-born workers into labor markets are difficult to measure. The effects of immigration have to be isolated from many other influences that shape local and national economies and the relative wages of different groups of workers. Firms open and close, people retire, workers switch jobs, and a stream of young native-born job seekers comes of age. Changes occur in technology, global supply chains, international trade, and foreign investment. The inflow of the foreign-born

SUMMARY

5

at a given time is, under normal circumstances, a relatively minor factor in the \$18 trillion U.S. economy.

The measurement task is further complicated because the impact of immigration on labor markets varies across time and place, reflecting the size of the inflow, the skill sets of natives and incoming immigrants, the local industry mix, the spatial and temporal mobility of capital and other inputs, and the overall health of the economy. Some of the processes that are set in motion take place immediately upon arrival of the foreign-born, while others unfold over many years. Aside from supplying labor, immigration (like population growth generally) adds to consumer demand and derived demand for labor in the production of goods and services, which, in turn, may affect workers' wages and incomes.

Beyond these real-world complexities, several additional measurement problems must be resolved. Primary among these is that characteristics of local economies affect where people decide to live. Evidence suggests that immigrants locate in areas with relatively high labor demand and wages for the skills they possess and that immigrants are more willing than natives to relocate in response to changes in labor market conditions. If immigrants predominantly settle in areas that experience the highest wage growth, the observed wage growth (or dampened wage decline) may be erroneously attributed to the increase in immigration. Additionally, correct identification of the wage and employment effects of immigration must account for the possible migration response of natives to the arrival of immigrants. Researchers have made great strides in addressing these issues in recent decades; even so, the degree of success in dealing with them is still debated.

Empirical research in recent decades has produced findings that by and large remain consistent with those in *The New Americans*. When measured over a period of more than 10 years, the impact of immigration on the *wages* of natives overall is very small. However, estimates for subgroups span a comparatively wider range, indicating a revised and somewhat more detailed understanding of the wage impact of immigration since the 1990s. To the extent that negative wage effects are found, *prior immigrants*—who are often the closest substitutes for new immigrants—are most likely to experience them, followed by native-born high school dropouts, who share job qualifications similar to the large share of low-skilled workers among immigrants to the United States. Empirical findings about inflows of skilled immigrants, discussed shortly, suggest the possibility of positive wage effects for some subgroups of workers, as well as at the aggregate level.

The literature on *employment* impacts finds little evidence that immigration significantly affects the overall employment levels of native-born workers. However, recent research finds that immigration reduces the number of hours worked by native teens (but not their employment rate). Moreover, as with wage impacts, there is some evidence that recent immigrants

reduce the employment rate of prior immigrants—again suggesting a higher degree of substitutability between new and prior immigrants than between new immigrants and natives.

Until recently, the impact of high-skilled immigrants on native wages and employment received less attention than that of their low-skilled counterparts. Interest in studying high-skilled groups has gained momentum as the H1-B and other visa programs have contributed to a rapid rise in the inflow of professional foreign-born workers (about 250,000 people per year during the last decade). Several studies have found a positive impact of skilled immigration on the wages and employment of both college-educated and noncollege-educated natives. Such findings are consistent with the view that skilled immigrants are often complementary to native-born workers, especially those who are skilled; that spillovers of wage-enhancing knowledge and skills occur as a result of interactions among workers; and that skilled immigrants innovate sufficiently to raise overall productivity. However, other studies examining the earnings or productivity prevailing in narrowly defined fields find that high-skilled immigration can have adverse effects on the wages or productivity of natives working in those fields.

With so much focus in the literature on the labor market (and much of this on the short run), other economic consequences—such as the role of immigrants in contributing to aggregate demand, in affecting prices faced by consumers, or as catalysts of long-run economic growth—are sometimes overlooked by researchers and in policy debates. By construction, labor market analyses often net out a host of complex effects, many of which are positive, in order to identify direct wage and employment impacts.

The contributions of immigrants to the labor force reduce the prices of some goods and services, which benefits consumers in a range of sectors including child care, food preparation, house cleaning and repair, and construction. Moreover, new arrivals and their descendants are a source of demand in key sectors such as housing, which benefits residential real estate markets. To the extent that immigrants flow disproportionately to where wages are rising and local labor demand is strongest, they help equalize wage growth geographically, making labor markets more efficient and reducing slack.

Importantly, immigration is integral to the nation's economic growth. Immigration supplies workers who have helped the United States to avoid the problems facing stagnant economies created by unfavorable demographics—in particular, an aging (and, in the case of Japan, a shrinking) workforce. Moreover, the infusion by high-skilled immigration of human capital has boosted the nation's capacity for innovation, entrepreneurship, and technological change. The literature on immigrants and innovation suggests that immigrants raise patenting per capita, which ultimately contributes to productivity growth. The prospects for long-run economic

AR2022 501571

SUMMARY

7

growth in the United States would be considerably dimmed without the contributions of high-skilled immigrants.

### FISCAL IMPACTS

Beyond wage and employment considerations, policy makers and the general public are interested in the impact that an expanding population, and immigration in particular, has on public finances and the sustainability of government programs. All population subgroups contribute to government finances by paying taxes and add to expenditures by consuming public services—but the levels differ. On average, individuals in the first generation are more costly to governments, mainly at the state and local levels, than are the native-born generations; however, immigrants' children—the second generation—are among the strongest economic and fiscal contributors in the population. Estimates of the long-run fiscal impact of immigrants and their descendants would likely be more positive if their role in sustaining labor force growth and contributing to innovation and entrepreneurial activity were taken into account.

Two basic accounting approaches, each with advantages and disadvantages, can be used to estimate the fiscal impact of immigration. Static models may be used to analyze a specific time frame, often a tax year. If data are available, cross-sectional static models can be repeated over multiple years to calculate fiscal impacts for a historical period. By contrast, dynamic projection models can be used to compute the net present value of tax contributions and government expenditures attributable to immigrants and, in some analyses, their descendants projected over their life cycles. Such analyses involve modeling the impact of an additional immigrant on future public budgets.

Regardless of the modeling approach, assumptions play a central role in analyses of the fiscal impacts of immigration. An important example is how the children of immigrants are treated in the analysis. In forward-looking projections, the logic for including second generation effects is straightforward: Even when the children of immigrants are native-born citizens, the costs and benefits they generate to public finances would not have accrued in the receiving country had their parents not immigrated in the first place. In cross-sectional analyses, life-cycle effects are captured only to the extent that data are detailed enough to reveal earnings levels of the children of immigrants once they become adults. Even then, the current fiscal contribution of today's adults provides only an imperfect estimate of the future contribution of today's children.

Analysts must also make assumptions about immigrants' use of public services. For services such as education and health care, where the total cost of provision is roughly proportional to the number of recipients, expendi-

tures should be assigned on a per capita, average cost basis. In other cases, the marginal cost of provision may differ greatly from the average cost. For pure public goods (such as national defense, government administration, or interest on the national debt),4 the marginal cost of an additional immigrant is, at least in the short run, zero or close to it; thus, for answering some questions, it may be reasonable to allocate the costs of pure public goods only to the native-born or to the pre-existing population consisting of natives and earlier immigrants. For analyses estimating the fiscal impact of other kinds of immigration scenarios—for example, for large numbers of arrivals taking place over a multiyear period—the zero marginal cost assumption becomes less tenable. Because public goods such as national defense represent a large part of the federal budget, decisions about how to allocate these expenditures have a very large impact on fiscal estimates. For forward-looking intergenerational accounting models, additional assumptions must be made about government budgets, the tax burden across generations, and the interest rate, all of which can affect results dramatically.

While cross-sectional estimates of fiscal impacts are limited in a number of ways, 20 years of Current Population Survey (CPS) data on the first and second generations analyzed by the panel reveal numerous insights about the fiscal impacts of immigrants at the national level:

- Immigrant and native-born populations have historically been and remain very different in terms of their age structure. For the 1994-2013 analysis period, the first generation was heavily concentrated in working ages. Meanwhile, during the early years of this period, the second generation had higher shares of elderly and young people relative to the first and third-plus generations;<sup>5</sup> however, by 2012, the second generation had become more heavily concentrated at younger ages, including younger adults.
- Cross-sectional data from 1994-2013 reveal that, at any given age, the net fiscal contribution of adults in the first generation (and not including costs or benefits generated by their dependents) was on average consistently less favorable than that of the second and third-plus generations. Relative to the native-born, the foreign-born contributed less in taxes during working ages because they earned less. However, this pattern reverses at around age 60, beyond which the third-plus generation has consistently been more

<sup>&</sup>lt;sup>4</sup>A pure public good has the characteristic that its consumption by one individual does not reduce the amount available to be consumed by others, and it is not possible to exclude any individuals from consuming the good.

<sup>&</sup>lt;sup>5</sup>Throughout the report, "third-plus generation" is used as shorthand to refer to any American who is in the third or higher generation after immigration (generally, those with two U.S.-born parents).

expensive to government on a per capita basis than either the first or second generation; this is attributable to the third-plus generation's greater use of Social Security benefits.

9

- The same cross-sectional analysis for 1994-2013 reveals that second generation adults had on average a more favorable net fiscal impact for all government levels combined than either first or third-plus generation adults. Reflecting their slightly higher educational achievement, as well as their higher wages and salaries (at a given age), the second generation contributed more in taxes on a per capita basis during working ages than did either of the other generational groups.
- Examining the per capita fiscal impact in an alternative way that reflects the age structure of each generational group as it actually existed in each year during the 1994-2013 analysis period produces a different perspective on the data. For this analysis, the panel included net fiscal costs of dependent children as part of the calculations for their parent's generation. Under the conservative assumption that the per capita fiscal cost of public goods such as national defense should be assigned on an average cost basis, the first generation group (including dependent children) again had a more negative fiscal impact than either of the other generation groups. This outcome is primarily driven by two factors: First, the lower average education level of the first generation translated into lower incomes and, in turn, lower tax payments; second, higher per capita costs (notably those for public education) were generated at the state and local levels because the first generation had, on average, more dependent children than other adults in the population (due in part to the age structure of first generation adults). A partially offsetting positive fiscal impact was created by the fact that, during the analysis period, first generation adults were disproportionately of working ages and paying taxes.
- Under the same assumptions as above, and using the same data, the fiscal impact of the second generation group (including their dependent children) was only modestly less negative than for the first generation over the period as a whole and considerably more negative than that of the third-plus generation. This result may appear at odds with the *age-specific* data indicating that the second generation typically outperforms all other generations along a number of dimensions, including years of education, per capita wage and salary income, and per capita taxes paid. This apparent incongruity is due mainly to changing age profiles. At the beginning of the 1994-2013 period, the second generation was concentrated in the (fiscally expensive) retirement ages. By 2013, comparatively

#### THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

more second generation individuals were in younger age groups, while more third-plus generation individuals were in older age groups. As a result of this demographic shift, the second generation group's fiscal impact became only slightly more negative than that of later generations. The larger negative effect for the second generation group during the analysis period was due entirely to their age distribution.

- Figures for the 1994-2013 analysis period translate into large fiscal shortfalls overall for all three groups (although the federal and total fiscal picture became more favorable for the first and second generation groups over the period, while it generally became less favorable for the third-plus generation group). These shortfalls are consistent with deficit figures in the National Income and Product Accounts for the federal-, state-, and local-level budgets combined. For 2013, the total fiscal shortfall (i.e., the excess of government expenditures over taxes) was \$279 billion for the first generation group, \$109 billion for the second generation group, and \$856 billion for the third-plus generation group. Under this scenario, the first generation group accounted for 17.6 percent of the population and 22.4 percent of the total deficit, while the second generation accounted for a slightly higher share of the total deficit (8.7%) than their share in the population (7.4%). While the fiscal shortfall for the average member of the first generation group was larger than it was for an average member in either native-born group, the shortfall for the latter groups would have been larger without the presence of the first generation group because federal expenditures on public goods such as national defense (assigned to members of all three groups on an average cost basis here) would have to be divided among a smaller population.
- Because government expenditures on public goods are large, accounting for almost one-third of total federal spending, the average versus marginal cost assumption is an important driver of fiscal impact estimates. When a marginal cost allocation of public goods is assumed instead of the average cost allocation used in the fiscal impact numbers reported above, the total net fiscal impact of the first generation group accounts for less than 4 percent of the total deficit, while still accounting for 17.6 percent of the sample population.

<sup>&</sup>lt;sup>6</sup>Again, in this analysis, dependent children are included in the generational group of the parent to which they are assigned.

SUMMARY 11

Models that project the fiscal impact of immigrants and their descendants—that is, models that add up the future tax payments and benefit receipts each year from the time of entry into the United States—provide an alternative to the static historical analyses described above. Although the assumptions involved—about the government budget, choice of interest rate, or who pays for public goods—strongly influence the results, additional important insights about the impact of immigration on fiscal balances can be derived as follows:

- Viewed over a long time horizon (75 years in our estimates), the fiscal impacts of immigrants are generally positive at the federal level and negative at the state and local levels. State and local governments bear the burden of providing education benefits to young immigrants and to the children of immigrants, but their methods of taxation recoup relatively little of the later contributions from the resulting educated taxpayers. Federal benefits, in contrast, are largely provided to the elderly, so the relative youthfulness of arriving immigrants means that they tend to be beneficial to federal finances in the short term. In addition, federal taxes are more strongly progressive, drawing more contributions from the most highly educated. The panel's historical analysis indicates that inequality between levels of government in the fiscal gains or losses associated with immigration appears to have widened since 1994. The fact that states bear much of the fiscal burden of immigration may incentivize state-level policies to exclude immigrants and raises questions of equity between the federal government and states.
- Today's immigrants have more education than earlier immigrants and, as a result, are more positive contributors to government finances. If today's immigrants had the same lower educational distribution as immigrants two decades ago, their fiscal impact, expressed as taxes paid minus expenditures on benefits received, would be much less positive or much more negative (depending on the scenario). Whether this education trend will continue remains uncertain, but the historical record suggests that the total net fiscal impact of immigrants across all levels of government has become more positive over time.
- An immigrant and a native-born person with similar characteristics will likely have about the same fiscal impact. Persons with higher levels of education contribute more positively to government finances regardless of their generational status. Furthermore, within age and education categories, immigrants generally have a more salutary effect on budgets because they are disqualified from some benefit programs and because their children tend to have

### THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

higher levels of education, earnings, and tax paying than the children of similar third-plus generation adults.

In addition to the net fiscal effects of immigration for the nation as a whole, the effects on revenues and expenditures for state and local governments are also of concern to policy makers and the public. The panel's analysis of subnational data indicates that the net burden of immigration to fiscal balance sheets varies tremendously across state governments. Consistent with findings in the national-level analyses (and for the same reasons), first generation adults plus their dependents tend to be more costly to state and local governments on a per capita basis than adults (plus their dependents) in the second or third-plus generations, and, in general, second generation adults contribute the most to the bottom line of state balance sheets.

For the 2011-2013 period, the net cost to state and local budgets of first generation adults (including those generated by their dependent children) is, on average, about \$1,600 each. In contrast, second and third-plus generation adults (again, with the costs of their dependents rolled in) create a net positive of about \$1,700 and \$1,300 each, respectively, to state and local budgets. These estimates imply that the total annual fiscal impact of first generation adults and their dependents, averaged across 2011-2013, is a cost of \$57.4 billion, while second and third-plus generation adults create a benefit of \$30.5 billion and \$223.8 billion, respectively. By the second generation, descendants of immigrants are a net positive for the states as a whole, in large part because they have fewer children on average than do first generation adults and contribute more in tax revenues than they cost in terms of program expenditures.

In jurisdictions with higher spending on schools (kindergarten through 12th grade), the relative cost of first generation immigrants with more dependents is typically higher compared with low-spending jurisdictions. However, this investment could drive higher wages in the future.

#### DATA RECOMMENDATIONS

The theoretical and empirical advances of recent decades have allowed researchers to address questions about the economic and fiscal impacts of immigration with greater confidence; nonetheless, some questions remain difficult to answer fully. Therefore, this report concludes by identifying data needs for pushing the knowledge frontier forward so that a report published 20 years from now will present an even more comprehensive portrayal of how immigration affects the economy and those engaged in economic activities. A key requirement is building into the nation's statistical infrastructure the capacity to monitor the net contributions of the native-born children of immigrants who help to shape the nation's economic and demographic

AR2022 501577

SUMMARY 13

future over the course of their entire lives. The ability to identify second generation respondents is extremely desirable for empirical analyses of both the labor market and fiscal impacts of the children of immigrants, who may on average attain different education and skill levels (often higher), achieve different occupational outcomes, and generate at least slightly different fiscal impacts compared with the general population. Perhaps the most important of the data recommendations for advancing research on immigration identified in this report—and also recommended in our sister panel's report (National Academies of Sciences, Engineering, and Medicine, 2015) *The Integration of Immigrants into American Society*—is for the U.S. Census Bureau to add a question on the birthplace of parents to the American Community Survey (ACS). This addition would permit more accurate monitoring of local populations and labor forces than is possible with the current source of such information, the CPS, which while highly valuable has a considerably smaller sample size than the ACS.

# PART I

# BACKGROUND AND CONTEXT

ase 1:18-cv-00068 Document 611-1 Filed on 11/04/22 in TXSD Page 592 of 7

1

# Introduction

#### 1.1 CONTEXT AND MOTIVATION

Immigration is not a new phenomenon. The United States has been a nation of immigrants<sup>1</sup> throughout its history. Nonetheless, the issue of immigration has often risen to the fore, and today many Americans view immigration as one of the top policy issues facing the nation.<sup>2</sup> Perhaps this should come as no surprise given that the percentage of foreign-born in the U.S. population has been steadily growing, increasing from 4.7 percent in 1970 (the lowest ever measured for the United States) to 11.1 percent in 2000, and further rising to 13.3 percent in 2014 (approaching the historical highs attained 100 years ago). An even higher percentage of households have at least one family member who is foreign born. According to the

<sup>&</sup>lt;sup>1</sup>In general in this report, the term "immigrant" is used synonymously with the term "foreign-born." In doing this, the panel follows common statistical practice for referring to the foreign-born population counted in a census or estimated by a survey as "immigrants," even though the category includes foreign students, temporary workers on H-1B and other visas, and migrants who entered the country surreptitiously or overstayed legal visas. Further, in portions of the report, such as in the fiscal analyses in Chapters 8 and 9, we distinguish between immigrant generations: the first generation (who are foreign-born), the second generation (those born in the United States to at least one foreign-born parent), and the third-and-higher generations (those born in the United States to native-born parents). For brevity, the report uses "third-plus generation" to refer to the latter group. In Chapter 2, Section 2.10 (Counting Immigrants) addresses these and other definitional issues.

<sup>&</sup>lt;sup>2</sup>In the 2015 edition of the Pew Research Center's annual policy priorities survey, 52 percent of Americans rated immigration a "top priority for the president and Congress." (Pew Research Center, 2015b).

Census Bureau, more than 20 percent of married couples in the United States include a spouse born in another country. And nearly one-quarter of the U.S. population is either foreign born themselves or has at least one foreign-born parent (Pew Research Center, 2015a, p. 120). Moreover, the largest increases in the percentage of foreign-born in recent years have taken place in states—many of them in the South—unaccustomed to immigration.<sup>3</sup> Hence, immigration is undeniably a key factor shaping many communities and households. In workplaces, classrooms, and neighborhoods across many parts of the country, daily interaction among the native-born, earlier immigrants, and new arrivals is the norm, and these interactions raise awareness of immigration across the population more broadly.

Immigration is also constantly in our purview because it is an ongoing process. And, given divergences in demographic trends and economic opportunities that persist across regions of the world, it is one that is likely to continue. The stream of arrivals—at times a relative trickle and at times rapid—not only affects the environment in which we live, learn, and work, but also interacts with nearly every policy area of concern, from jobs and the economy, education, and health care to the federal budget deficit. Thus, immigration factors into a nearly endless list of social and economic questions whose answers will shape the nation's future.

This study assesses the impact of dynamic immigration processes on economic and fiscal outcomes for the United States, a major destination of world population movements. Related topics, such as the occupational, educational, and other assimilation issues faced by immigrants themselves, necessarily enter the discussion along the way.<sup>4</sup> The report is organized into three major sections: Part I (Chapters 1-3) provides background and context by placing immigration to the United States in historical perspective and statistically describing the economic assimilation of immigrants in recent history. Part II (Chapters 4-6) assesses economic impacts of immigration, focusing on wages, employment, and labor markets generally, as well as on broader economic activity and long-run growth. Part III (Chapters 7-10) estimates fiscal impacts over recent past periods for federal and state governments and presents illustrative future immigration scenarios for the federal level.

<sup>&</sup>lt;sup>3</sup>The states where the proportion of foreign-born has risen by one-third or more since 2000 are Alabama, Arkansas, Indiana, Iowa, Kentucky, Louisiana, Maryland, Mississippi, Nebraska, North Dakota, Oklahoma, Pennsylvania, South Carolina, South Dakota, Tennessee, and Wyoming. This calculation is based on Decennial Census and American Community Survey data presented in Grieco et al. (2012).

<sup>&</sup>lt;sup>4</sup>The integration of immigrants into American society—specifically, their outcomes in terms of educational attainment, occupational distribution, income, residential integration, language ability, and poverty—is the focus of a companion report, *The Integration of Immigrants into American Society* (National Academies of Sciences, Engineering, and Medicine, 2015).

INTRODUCTION

ase 1:18-cv-00068 Document 611-1 Filed on 11/04/22 in TXSD Page 594 of 7

The last major report from the National Academies of Sciences, Engineering, and Medicine to take on these topics comprehensively was The New Americans: Economic, Demographic, and Fiscal Effects of Immigration, released in 1997 (National Research Council, 1997). One conclusion of that report was that immigration flows were unlikely to have a very large effect on the earnings of the native-born or on per capita gross domestic product (GDP). However, the report recognized that immigration can have sizable effects on segments of the workforce and on specific geographic areas with high concentrations of immigrants. Similarly, fiscal impacts overall were found to be modest but highly variable at the margin, mainly due to the great variety in age, education, and experience brought by new arrivals. One reason for revisiting these topics is to reconsider how findings about economic and fiscal impacts may have changed in the past 20 years, given the very different political, economic, and demographic context of the present relative to the 1990s. A key underlying question is: "How is what is known now about the consequences of immigration different from what was thought before, either because of expanded and improving research or because of changed circumstances?"

The following short "then and now" list summarizes how the context has shifted and why a reassessment is warranted.

- 1. Between the mid-1990s and 2014, the total number of immigrants living in the United States increased by more than 70 percent, from 24.5 million in 1995 to 42.3 million in 2014 (based on published data from the 1995 Current Population Survey and the 2014 American Community Survey). Over the same period, the number of unauthorized immigrants estimated to be in the United States roughly doubled from about 5.7 million in 1995 to about 11.1 million (Passel and Cohn, 2016).
- 2. Regarding inflows, legal immigration has increased somewhat. During the 1980s, just under 600,000 (577,000 annual average over 1980-1989) immigrants were admitted legally each year (received green cards); after the Immigration Act of 1990 took effect, legal admissions increased to just under 800,000 per year.<sup>5</sup> Then, from

19

<sup>&</sup>lt;sup>5</sup>Approximately 785,000 green cards, granting lawful permanent residency, were issued per year over the 1992-2000 period. The vast majority of these went to foreign-born individuals qualifying as family of a U.S. citizen or lawful permanent resident, admitted through employer sponsorship, granted protection as refugees or asylum seekers, or originating from countries with low immigration rates to the United States (also known as diversity immigrants or greencard lottery immigrants). A small percentage of individuals and their dependents during this period also benefited from the Immigration Reform and Control Act of 1986, which legalized certain seasonal agricultural workers as well as unauthorized individuals who entered the United States before January 1, 1982, and met a set of standard naturalization conditions.

### THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

2001 on, legal admissions averaged more than 1 million per year (1,043,000 for 2001-2014).<sup>6</sup> Another major change, beginning in the 1990s, has been the increased entrance of immigrants via temporary foreign worker visas—including through the H-1B program, which allows U.S. companies to temporarily employ foreign workers in high-skilled, specialty occupations. Since the category was created in 1990, the number of H-1B visas made available each year has been limited to an annual statutory cap of 65,000; however, higher caps (115,000 or 195,000) were put in place from 1999-2003 and, since 2006, 20,000 additional visas have been available for foreign professionals who graduate with a master's degree or doctorate from a U.S. university.

500,000 per year between 1990 and 2007 as a result of large

- inflows of new unauthorized immigrants offset by smaller outflows of those already here. In the early 1990s, inflows were averaging 400,000-500,000 per year. By the first 5 years of the 21st century, average annual inflows of new unauthorized immigrants reached more than 800,000 every year. After 2007, the pattern changed dramatically; the unauthorized immigrant population decreased by about 1 million over the next 2 years as outflows increased substantially and inflows of new unauthorized immigrants dropped from the high levels of the early 2000s. Since 2009, the unauthorized immigrant population has remained essentially constant as inflows and outflows have reached a rough balance. During this period, 300,000-400,000 new unauthorized immigrants have arrived each year and about the same number have left the United States.

  4. With respect to overall economic conditions, *The New Americans*
- 4. With respect to overall economic conditions, *The New Americans* (National Research Council, 1997) was released in the midst of a period of prolonged real GDP growth, with annual rates ranging from 2.7 to 4.0 percent between 1992 and 1996 and from 4.1 to 4.8 percent between 1997 and 2000. Since 2000, the United States has experienced a major 2-year slowdown and a rebound, followed by the Great Recession (which reached its nadir with a –2.8 percent GDP decline in 2009) and a long slow recovery.

<sup>&</sup>lt;sup>6</sup>There is no strong trend after 2001. There was a drop in 2003 due to increased security checks and start-up delays for the U.S. Department of Homeland Security, but these delays were offset by increases in 2005-2006.

- 5. The nation's federal public debt, expressed as a percentage of GDP, was in the 4446 percent range in 1997 and by 2001 had declined to 31 percent of GDP. The debt has been increasing since 2001 and has remained at more than 70 percent of GDP since the end of 2012. Indeed, total public debt, adding in state and local debt held by the public, is now greater than 100 percent of GDP. The increases of the past decade have occurred largely as a result of and in response to the Great Recession.<sup>7</sup>
- 6. Growth in the size of the civilian labor force has slowed from around 1.2 percent annually in the 1990s to 0.7 percent in the 2000s and to a projected 0.5 percent annual growth for this decade. This trend reflects current demographics (mainly an aging Baby Boom cohort reaching retirement age), more young people going to college, and a decline in labor force participation rates of working-age adults (including a leveling off of the decades-long trend of rising labor force participation by women). Workforce size and participation carries implications for fiscal balances and the sustainability of government retirement and health care programs because benefits are largely funded by taxes paid by current workers. Likewise, the number of workforce exits (mainly retirements)—which has increased from 18.8 million in the 1990s to 23.4 million in the 2000s and to a projected 27.3 million in the 2010s—has a major impact on the fiscal health of these programs.
- 7. The portion of the labor force that is foreign born has grown from about 11 percent to just over 16 percent in the past 20 years. The vast majority of current and future net workforce growth—which, at less than 1 percent annually, is very slow by historical standards—will be accounted for by immigrants and their U.S.-born descendants (Myers et al., 2013).
- 8. Population aging figures more prominently on today's political agendas than it did 20 years ago, driven by a number of factors including rising health care costs (since the mid-1990s, the nation's total expenditures on health care, as a share of GDP, have increased from roughly 13% to 18%) and concerns about the long-term viability of Social Security insurance as Baby Boomers retire. What an aging population portends for future workforce trends is highly uncertain. Much depends on incentives for seniors to remain in the labor force; on educational investments in youth, including the children of immigrants; and on the skill composition of future immigrants.

<sup>&</sup>lt;sup>7</sup>Federal Reserve Bank of St. Louis. *Total Public Debt as Percent of Gross Domestic Product*. Available: https://research.stlouisfed.org/fred2/series/GFDEGDQ188S [November 2016].

# 22 THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

9. Geographic patterns of immigrant settlement have changed in the past two decades, with immigrant families increasingly settling in "nontraditional" receiving states and communities. None of the traditional gateway states (California, Florida, New Jersey, and New York), where immigrants make up roughly 20 percent or more of the population, were among the top seven states with the highest growth rates over 1990-2010. Over that 20-year period, Arkansas, Georgia, Kentucky, Nevada, North Carolina, South Carolina, and Tennessee, each experienced growth rates over 300 percent—albeit from low initial immigrant populations at the beginning—in their immigrant populations.

Intertwined with many of the trends identified above was the Great Recession, extending officially from December 2007 to mid-2009, which had devastating consequences for middle- and low-income households, particularly those whose members were among the 8 million workers who lost their jobs and whose wealth was based on inflated housing prices (Economic Policy Institute, 2012). Although the recession officially ended in June 2009, the labor market response has been sluggish, unlike trade and industrial growth, which has direct implications for economic opportunity. As in the "jobless recovery" after the 2001 recession (Bernstein, 2003), employment growth has been slow and highly uneven by skill level, industry sector, and occupation (Carnevalle et al., 2015). Even with unemployment falling from its recession peak of 10.0 percent (October 2009) to its current rate of around 5 percent during the slow recovery, the addition of 6.8 million nonfarm payroll jobs in the 42 months since February 2010 when payrolls bottomed out is below the number lost during the market contraction. 8 However, the job growth picture is mixed: Median earnings for fulltime, full-year workers have at least returned to and possibly now exceed pre-recession levels; growth in low-wage jobs also has restored recession losses; and the gap between the earnings of young and experienced workers has widened. Some of these trends have potentially exacerbated wage gaps by skill level.

In addition, rising immigration is far from being just a U.S. trend. The rise in the share of foreign-born populations is an international phenom-

<sup>&</sup>lt;sup>8</sup>These figures come from Pew Research Center analysis of Bureau of Labor Statistics data. Available: http://www.pewresearch.org/fact-tank/2013/09/25/at-42-months-and-counting-current-job-recovery-is-slowest-since-truman-was-president [November 2016].

INTRODUCTION 23

enon among the developed countries,<sup>9</sup> although the experiences of each nation are sufficiently disparate that claims about the consequences of immigration are unlikely to hold across all places at all times.

The drivers behind migration patterns to the top destination countries are also diverse. Geographic proximity is a factor in most but not all cases. For example, there are close to 12 million Mexican-born individuals living in the United States, but there are also 3 million U.S. residents born in India and 1.9 million born in the Philippines. And 4.7 million UK-born individuals are living in Australia. Differences in the restrictiveness embedded in a nation's policy objectives affect the size and composition of immigrant inflows. The primary entry-purpose designations are "economic," "family reunification," "asylum and humanitarian," and "student." Family reunification is the largest avenue through which individuals qualify for admission and for lawful permanent residence in the United States, and those entering under this designation represent more than 60 percent of all legal entries. The United States is somewhat unusual in this respect, as most other countries use entry categories other than family reunification at higher rates. <sup>10</sup>

Economic incentives motivate much of the world's population movements. The Australian government (as well as others, such as the UK government) has formalized this objective—albeit from the receiving country's perspective—instituting a point-based system in 1989 designed to grant visas based on the personal attributes of applicants indicating their ability to contribute to society, defined primarily by their occupational category. An extreme example is the United Arab Emirates. As a result of massive guest worker programs, more than 80 percent of its population consists of foreign-born individuals, <sup>11</sup> the vast majority of whom are excluded from

<sup>&</sup>lt;sup>9</sup>The Migration Policy Institute has a comprehensive and easily understood set of interactive maps, charts, and other visuals on international migration statistics, showing trends over time and across countries. Available: http://www.migrationpolicy.org/programs/data-hub/international-migration-statistics [November 2016]. See also the *International Migration Outlook 2015* (OECD, 2015).

<sup>&</sup>lt;sup>10</sup>The events surrounding the resettlement of people fleeing turmoil in Syria since the onset of the civil war there in 2011 has put pressure on the United States to increase the number of refugees it accepts above the current annual cap of 70,000. A plan by the Obama administration would increase the number of refugees (people who can prove they are escaping war or persecution) to 100,000 by 2017—still a small fraction of foreign-born admitted to the United States and a very small number compared with the millions of Syrians living in Jordan, Lebanon, and Turkey, and now Germany and other parts of Europe. (Through the first half of 2015, Germany had received nearly 100,000 Syrian refugees.) Debate about these different immigration policy paths by the candidates has played a prominent role in the run-up to the 2016 presidential election.

<sup>&</sup>lt;sup>11</sup>Temporary workers such as these generally are not considered immigrants as defined in Chapter 2.

citizenship and access to government programs. China is a major sending country, mainly due to its enormous overall population but also because of its many students studying abroad (mainly in the United States).

Beyond these broad developments in the national and global environment, there have been changes over the past two decades in the characteristics of immigrants (and the native-born) in the United States and in the environments to which they arrive. Trends—in age, education, occupation, country of origin, and opportunities and constraints—that directly shape immigrant integration are documented in much greater detail in Chapters 2 and 3, as are historical developments in the policy environment. Together, these first three chapters set the context for the subsequent chapters, which analyze how these variables interact to affect wage, employment, and other economic and fiscal outcomes.

#### 1.2 ECONOMIC IMPACTS

The consequences of immigration for individuals already established in a receiving country, particularly those involving wage and employment prospects, are a long-standing concern to a range of stakeholders. The headline questions are: Do immigrants take jobs away from natives; do they lower the wages of natives? Do immigrants complement native-born workers or are they more often substitutes? What occupational niches do immigrants fill for the benefit of the rest of the economy? What is the role of immigrants in driving productivity change and long-term economic growth? And what is their role in contributing to vibrancy in construction, agriculture, high tech, and other economic sectors?

A deep though not fully unified literature addresses these concerns. The panel's review and assessment of this literature, which deals with labor markets specified in a number of different ways (e.g., by skill group, by occupation, by geographic area), reached a number of conclusions. As explored in detail in Chapter 5, wage and employment outcomes resulting from immigration are closely tied to the extent to which new arrivals complement or substitute for workers already established in the labor market. For cases in which immigrants and natives specialize in different occupational activities—perhaps the former as construction workers or scientists and the latter as supervisors or financial analysts—wage gains and job creation become likely outcomes. When new arrivals compete with those already in the labor force—for example, if unskilled immigrants and native-born teenagers (or earlier immigrants) are applying for the same fast food restaurant jobs—wages and job opportunities for the latter may be negatively impacted, at least in the short run.

The definitiveness of the panel's conclusions is tempered by the fact that measurement of the impacts created by flows of foreign-born individuals INTRODUCTION 25

into labor markets is difficult. The effects of immigration have to be isolated from innumerable, simultaneously occurring influences that shape local and national economies. Beyond this measurement challenge, the relation between immigration labor inflows and market outcomes is not a constant; it varies across places and immigration episodes, reflecting the skill set of incoming immigrants and natives in destination locales, a given market's mix of industries, the spatial and temporal mobility of capital and other inputs, and the overall state of the economy. Although a labor market emphasis has created a rich economics literature on immigration, there are still a number of unresolved empirical questions, which this report explores.

Much of the wage and employment research reviewed in Chapters 4 and 5 involves essentially static marginal analyses answering the question, "if x new arrivals are added to the labor supply, what are the likely shortrun market impacts?" Many fiscal analyses—for instance, the impact on state, local, or federal budgets this year or the projected life-cycle fiscal impacts for the nation—are similarly oriented toward assessing marginal effects. However, it is also important to consider the dynamics underlying an expanding economic pie, dynamics that operate over long time periods. Thus, to the labor market discussion we attempt to overlay a critical issue that is sometimes overlooked: the relationship between immigration and economic growth. Once it becomes clear that immigration contributes to long-term economic expansion in a way that accommodates a larger population, assessments of short-term adjustments and societal costs can be placed in a more complete context.

Long-run growth requires infusions of labor, various forms of capital both physical and human—and technology. Given native fertility rates and age profiles in the United States and in many other industrialized nations, immigrants are the most likely candidates for generating net labor force growth. Likewise, they contribute to capital formation and innovation, which also shapes the way and the pace at which growth unfolds. Easterlin (1980) wrote about the impact of immigrants and family formation on cycles of growth in the American economy before the restrictive immigration regulation in the 1920s. Cutler et al. (1990) and many others have discussed the implications of population aging on secular stagnation in Japan and Europe while finding the United States less affected because of higher immigration rates. Population aging is a major policy issue in part because of slowing labor force growth and a declining ratio of workers to dependents but also because, relative to other adult age groups, older people purchase fewer houses and durable goods, which drive a significant component of economic demand. The demographic profile of immigrants factors into these trends in obvious ways: One-half of the foreign-born are between the ages of 18 and 44 (about 80% are between the ages of 18 and 64), compared with about one-third of the native-born (about 60% are between 18 and 64).

ase 1:18-cv-00068 Document 611-1 Filed on 11/04/22 in TXSD Page 601 of 7 $^\circ$ 

THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

An essential piece of the long-run economic analysis investigated in Chapters 5 and 6 involves immigrants and their contributions to human capital development, scientific advancement, and innovation. For this reason, researchers are increasingly interested in documenting trends of the foreignborn among students studying and professionals working in science, technology, engineering, and mathematics (STEM) fields; their roles in business creation, patenting and other activities related to innovation, productivity, and growth are also being examined. To the extent that immigrants can add disproportionately to cutting-edge science activities occurring in universities and research labs, the U.S. economy is likely to benefit. The National Science Foundation's 2010 National Survey of College Graduates suggests that this is indeed the case. For example, 60 percent of foreign graduate students were enrolled in STEM fields, and although the foreign-born represent only 14 percent of all employed college graduates, they account for 50 percent of those with doctoral degrees working in mathematics and computer science occupations. 12 Immigrants are also overrepresented in Silicon Valley high-tech firms; roughly one-fourth of high tech startups during the period 1995-2005 included at least one immigrant among the firm's founders. Beyond science and technology, immigrants have historically played a key role in small-scale retailing, which can help to revitalize urban (and sometimes rural) areas, expanding nascent business sectors by lowering the cost of goods and services; examples include nail salons, ethnic restaurants, child and elder care, and lawn care and gardening. Recent studies (e.g., Fairlie, 2012) indicate that immigrants display entrepreneurial rates above those of the native-born population.<sup>13</sup>

#### 1.3 FISCAL IMPACTS

Part III of this report (Chapters 7-10) assesses the impact that immigration has on fiscal trends at the federal and state levels of government. Along with wages and employment consequences, the fiscal impact is the other major factor determining the extent to which immigrants are or will

<sup>&</sup>lt;sup>12</sup>National Science Foundation's National Center for Science and Engineering Statistics, Science and Engineering Indicators 2012. Available: http://www.nsf.gov/statistics/seind12/ pdf/c02.pdf [November 2016]. Interestingly, as pointed out by Teich (2014), whereas the H-1B visa program is often viewed as the mechanism whereby science and engineering and, in turn, innovation can be strengthened—and scientists and engineers engaged in research and development are indeed brought in or allowed to extend stays under the program—the majority of H-1B visa recipients are in computer programming and other information technology fields. Many immigrants working under H-1B visas do so for firms that outsource information technology services overseas.

<sup>&</sup>lt;sup>13</sup>However, due to a smaller average size of new businesses started by the foreign-born, their relative contribution to job creation is less clear (Fairlie, 2012).

27 INTRODUCTION

be net economic contributors to the nation. The headline questions here include the following: What are the fiscal impacts of immigrants for state and federal governments; do they cost more or less than they contribute in taxes? How do the fiscal impacts change when traced over the life cycle of immigrants and their children? How does their impact on public finances compare with others in the population?

In formulating immigration policy, information about public finances specifically the added tax burden or benefit to those already in the country created by new immigrants—is of central interest. 14 In addition, immigration affects the growth rate of government outlays. By adding workers and beneficiaries to the economy at different rates relative to the nativeborn, immigration affects the long-term financial health of programs such as Social Security and medical care programs. Answering such questions about long-term implications requires calculating how fiscal impacts change when traced over the life cycle of immigrants, their children, and future generations.

Recent studies suggest an increasing recognition of the need to understand the fiscal challenges of immigrant integration in an environment characterized by a mismatch between the federal government's revenues and spending. The 2010 report Choosing the Nation's Fiscal Future assessed the options and possibilities for a sustainable federal budget (National Research Council and National Academy of Public Administration, 2010). That study considered a range of policy changes that could help put the budget on a sustainable path, including reforms to reduce the rate of growth in spending for Medicare and Medicaid, options to reduce the growth rate of Social Security benefits or to raise payroll taxes, and changes in many other government spending programs and tax policies. Among the policy recommendations the study considered was the option of expanding the numbers of immigrants, especially skilled workers, with the expectation that this could boost the working portion of the U.S. population, thus helping to pay for benefits to the elderly. However, the report concluded that because immigrants obviously grow old, too, any budget fix from increased immigration would be a temporary one; even if immigration doubled or tripled from current rates, only a small long-term contribution to aggregate income and to federal revenues could be expected (National Research Council and National Academy of Public Administration, 2010, p. 31). By

<sup>&</sup>lt;sup>14</sup>That the Congressional Budget Office produces estimates of these impacts indicates the high degree of political interest. For example, in a recent analysis of the 2013 Senate immigration reform bill by the Executive Office of the President (2013), the Congressional Budget Office estimated that the bill's enactment could reduce the federal budget deficit by nearly \$850 billion over the next 20 years, in large part due to increased work by otherwise unauthorized immigrants who would become authorized under the bill, along with greater ability to tax their earned income.

contrast, Myers (2012) used Census Bureau projections to conclude that, if immigration slows the process at a critical time, it does not have to stop population aging completely in order to be beneficial. He demonstrated that the critical fiscal problem now facing the United States is linked to the sharp increase (by roughly two-thirds) in old-age dependency on federal benefit programs that would occur between 2010 and 2030. Immigration can reduce the program deficit impact in that critical period, even though "immigrants grow old, too" in later decades. The fiscal projections in Chapters 8 and 9 of this report illustrate how highly dependent public expenditures and tax revenues are on the population age structure.

As with estimates of employment and wage impacts, estimating the fiscal impacts of immigration is a complex calculation that depends to a significant degree on what the questions of interest are, how they are framed, and what assumptions are built into the accounting exercise. The first-order *net fiscal impact* of immigration is the difference between the various tax contributions immigrants make to public finances and the government expenditures on public benefits and services they receive. The foreign-born are a diverse population, and the way in which they affect government finances is sensitive to their demographic and skill characteristics, their role in labor and other markets, and the rules regulating accessibility and use of government-financed programs.

The potential to alter a nation's or state's fiscal path is greatest when the sociodemographic characteristics of arrivals differ distinctly from those of the overall population—and particularly when these characteristics are linked to employment probability and wage levels. In the United States, immigrants have historically exhibited lower skills and education and, in turn, lower income relative to the native-born. However, as described in Chapter 3, after 1965 substantial numbers of the foreign-born are now in high-skilled occupations as well. Age at arrival is another important determinant of fiscal impact: The very young and the very old typically create net costs to government programs. Immigrants arriving while of working age—who pay taxes almost immediately and for whom per capita social expenditures are the lowest—are, on average, net positive contributors. This value gradually declines with higher age at entry, as the projected number of years remaining in the workforce becomes smaller. For immigrants with lower levels of education, the net present value of expected contributions is much smaller initially and turns negative at a much earlier

<sup>&</sup>lt;sup>15</sup>Population projections by the Pew Research Center (2015a) indicate that post-2015 cumulative immigration is likely, by 2050, to reduce the ratio of seniors to the overall population by one-fourth relative to what it would be without immigration. Myers (2012) contended that the logical error stems from focusing only on the endpoint commonly used in Social Security population projections—85 years out—when the greatest problem is the sharp age increase from 2020 to 2030.

INTRODUCTION 29

age. Those arriving after age 21 also typically do not add to the largest state and local cost of immigration—the cost of public education in the receiving country—although their children will. These age and life-cycle variations in fiscal impacts are only realized over the course of many years.

When considering alternative scenarios, it can be important to differentiate immigrants by country of origin and legal status, as individuals grouped by these characteristics experience different outcomes in the labor market and different take-up rates for government services. As just one example of how heterogeneity may affect fiscal impacts, Camarota (2012) found that for the top immigrant-sending countries in 2010, the share of immigrant households participating in means-tested programs (e.g., food assistance and Medicaid) was highest for households headed by immigrants from Mexico (57%), followed by Guatemala (55%) and the Dominican Republic (54%). The lowest rates were for households headed by immigrants from Canada (13%), Germany (10%), and the United Kingdom (6%). Thus, the net fiscal impact of immigration for a particular state or the nation as a whole is driven by a rich set of contextual factors.

A comprehensive accounting of fiscal impacts is further complicated by secondary effects on the native-born population. For example, because new additions to the workforce may alter the wages or employment probabilities of those already employed, the impact on taxes paid directly by immigrants is only part of the picture. Moreover, revenues generated from the native-born who have benefited from economic growth and job creation attributable to immigrant innovators or entrepreneurs would also have to be included in a comprehensive evaluation, as would indirect impacts on property, sales, and other taxes and on per capita costs of the provision of public goods.

Accounting exercises such as those presented in Chapters 8 and 9 create combined tax and benefit profiles by age and education to decompose the timing and source of fiscal effects—and they typically deal only with the direct, not the secondary, effects. Forward-looking projections build scenarios to demonstrate alternative assumptions about how public expenditures—e.g., for public education and various programs (Aid to Families with Dependent Children; Medicaid; Special Supplemental Nutrition Program for Women, Infants, and Children; Supplemental Nutrition Assistance Program; Supplemental Security Income; etc.)—and revenues change by generation and affect a baseline fiscal estimate.

Part III explores a number of methodological approaches to address different accounting objectives. For some policy questions, multigenerational costs and benefits attributable to an additional immigrant or to the inflow of a certain number of immigrants may be most relevant. For others, the budget implications for a given year associated with the current immigrant population or for recent changes in the foreign-born population residing

THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

in a particular state or in the entire nation may be of interest—this is often the focus of state legislators, for example. Sometimes the question is about absolute net fiscal impacts; sometimes it is about the fiscal impact of an immigrant relative to that of an additional native-born person. Although these approaches require very different kinds of aggregations and calculations, the program (expenditure) and tax (revenue) fiscal components are largely the same.

### 1.4 CHARGE TO THE PANEL

The changing patterns of immigration and the evolving consequences for American society, institutions, and the economy continue to fuel public policy debate that plays out at the national, state, and local levels. The National Research Council has published a number of studies over the past 20 years that have been influential in these debates. 16 The foremost of these studies, The New Americans: Economic, Demographic, and Fiscal Effects of Immigration (National Research Council, 1997), was prepared in response to a request from the congressionally chartered Commission on Immigration Reform, which required a scientific foundation for policy making on immigration. The New Americans—parts of which are updated with more recent information by this report—focused on the effects of immigration on the future size and composition of the U.S. population, the influence of immigration on the U.S. economy, and, in particular, the fiscal impact of immigration on federal, state, and local governments.

Questions concerning immigrant integration were explored in a 2006 study focusing on the impact of the growing role of Hispanics in the United States. Multiple Origins, Uncertain Destinies: Hispanics and the American Future (National Research Council, 2006b) made important contributions to understanding the process of immigrant integration and its effects on families, education, the labor force, and health.

Since The New Americans, a growing body of research and improved sources of data—most notably, the American Community Survey, the New Immigrant Survey, and a longer series of Current Population Surveys—have made it possible to fruitfully update that report's findings. Remaining, significant data gaps notwithstanding (described in Chapter 10), it is now more possible than ever to assess the consequences of immigration for the

<sup>&</sup>lt;sup>16</sup>Among these reports are The New Americans: Economic, Demographic, and Fiscal Effects of Immigration (National Research Council, 1997); The Immigration Debate: Studies on the Economic, Demographic, and Fiscal Effects of Immigration (National Research Council, 1998); America Becoming: Racial Trends and Their Consequences (National Research Council, 2001); Hispanics and the Future of America (National Research Council, 2006a); and Multiple Origins, Uncertain Destinies: Hispanics and the American Future (National Research Council, 2006b).

INTRODUCTION 31

#### BOX 1-1 Statement of Task

The National Academies' National Research Council will appoint a committee of leading economic, demographic, and fiscal experts to study the economic and fiscal impact of immigration. The expert panel will (1) summarize existing knowledge about the economic and fiscal impacts of immigration; (2) project immigration and related economic and fiscal trends to the year 2050, or present an analysis of projection scenarios representing best research on the topic; (3) discuss implications of the panel's findings for economic and fiscal policy, particularly with regard to expenditure and tax programs; and (4) identify gaps in our existing knowledge and in the data infrastructure.

The goal of the project is to lay the basis for informed and fact-based discussion of the issues surrounding current immigration into the United States among a wide range of audiences from policy makers to researchers, teachers, and the general public. In carrying out its charge, the panel will address a list of specific questions about the impacts of immigration on:

- · overall living standards and the macro economy;
- · wages and income of U.S. natives and immigrants;
- the labor market broadly (e.g., to what extent does immigrant labor complement and substitute for native employment);
- budgets and fiscal health at the federal, state, and local levels; and
- intergovernmental fiscal dynamics (e.g., the distribution of the budget impact across federal, state, and local entities).

At the conclusion of the study, the National Academies Press will publish a consensus report of the panel that will be available on the Web and in paperback. In addition, dissemination activities will be planned to ensure that the report has an appropriate impact.

American economy in a shifting demographic, social, and political landscape. Given this backdrop, the Panel on the Economic and Fiscal Consequences of Immigration was formed by the National Research Council and tasked with assessing the fiscal and economic impacts of immigration. The Statement of Task guiding the panel's work is reproduced in Box 1-1.

The findings and conclusions in this report are intended to help inform basic policy conversations such as the following: How many immigrants to admit? What should be the composition of those admitted? What is the economic impact of enforcement dealing with immigration that takes place within and outside authorized channels? Which individuals and government levels benefit, in the short run and in the long run, from new immigration? Priorities and policy decisions depend in part on the kinds of information

#### 32 THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

about economic and fiscal impacts contained in this report; they may also

depend in part on other objectives—for example, the value (economic and noneconomic) to people of unifying families or of providing safe refuge for those fleeing oppression. How each of these objectives is weighted is a political matter, which is not addressed here. Nonetheless, an informed discussion of policy options does depend on accurate information; the panel hopes that this report provides such information for the economic and fiscal domains. The audience for the report begins with policy makers and lawmakers at the federal, state, and local levels but extends to the general public, nongovernmental organizations, the business community, educational institutions, and the research community.

# Immigration to the United States: Current Trends in Historical Perspective

#### 2.1 INTRODUCTION

More than 40 million persons living in the United States were born in other countries, and almost an equal number—the second generation have at least one parent who was born abroad. Together, the first generation (foreign-born) and second generation (U.S.-born children of the first generation) comprise almost one in four Americans (Pew Research Center, 2015a, p. 120). Political leaders and social commentators sometimes cite these large numbers as evidence that the United States is facing an unprecedented crisis that threatens the economy and the cultural fabric of U.S. society. However, current levels of immigration, though at record highs in absolute numbers, are not out of line with those experienced for most of American history when considered relative to the total U.S. population. The United States has witnessed successive waves of mass immigration that were initially seen as crises but are now celebrated as major contributions to a "nation of immigrants" (Kennedy, 2008; Martin, 2010). In the coming years, immigration will be the primary source of labor force growth in an increasingly aging population.

Placing current and future immigrant trends and patterns into historical perspective is the objective of this chapter. In addition to setting the stage for the subsequent chapters of this report, a look backward also provides context for understanding the contentious debates over immigration. Each generation of Americans, from the founding of the republic to the present day, has wrestled with questions of who should be allowed to enter the country and to become a citizen. Americans, especially natives and long-

settled immigrants, have always been suspicious of the qualities of newcomers: their character, their skills, their loyalty, and their potential to assimilate to American values and institutions (Zolberg, 2006). At many times during U.S. history, laws and policies were enacted to restrict the entry and freedoms of different groups of newcomers. But the door was never completely closed, and peoples from almost every part of the world have continued to seek refuge and opportunity on American soil that they could not find in their home countries (Daniels, 1991; King, 2000; Reimers, 1992).

The growth of the U.S. population from less than 4 million in 1790 to about 320 million in 2015 is due in no small measure to immigration. Most Americans today are the descendants of immigrants who arrived after the founding of the nation in the late 18th century (Edmonston and Passel, 1994, p. 61; Gibson, 1992). Their immigrant ancestors may not have been welcomed because their language, religion, culture, or appearance was not considered sufficiently "American." Yet, with the passage of generations, the children, grandchildren, and great-grandchildren of the successive waves of immigrants have become part of the American tapestry. This multigenerational process, which involves integration of different peoples, religions, and cultures, has diversified and broadened what it means to be "an American" (Gleason, 1980).

Immigrants and their descendants have also been accepted, even if not fully embraced, because of their determination and enterprise. Many immigrants are willing to undertake less desirable jobs than, and to settle in locations that are shunned by, native-born workers. The children of immigrants are often distinguished by their ambition and creativity (Hirschman, 2013), helping to invigorate American society and sustain this nation's world leadership in science and culture. In his 1958 book, *A Nation of Immigrants*, then-Senator John F. Kennedy claimed that the distinctive American culture of optimism and enterprise arises from our immigrant heritage.

In this brief survey, the panel addresses four major contemporary issues that have historical roots:

- 1. Are current levels of immigration higher than those experienced in the past?
- 2. How is immigration changing the racial and ethnic makeup of the U.S. population?
- 3. What will be the impact of immigrant workers on the U.S. economy as the Baby Boom generation departs the workforce?
- 4. How have the geographic settlement patterns of new immigrants changed in recent decades?

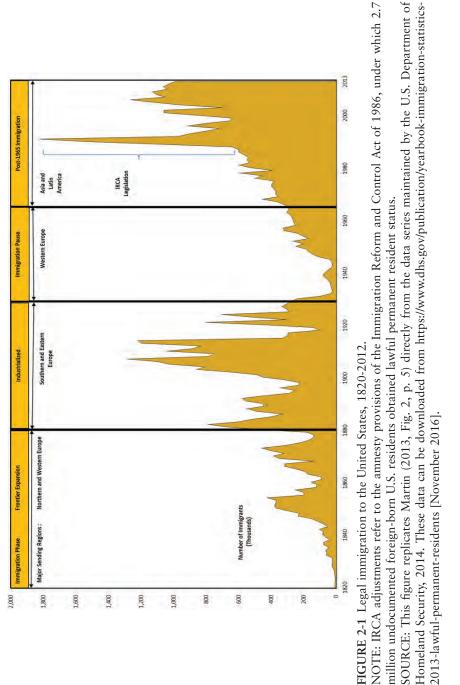
To understand the significance of these issues, the chapter begins with an overview of historical trends and patterns of immigration to the United

States. Three themes are emphasized (1) the volume of immigrant inflows and their changing origins; (2) the context of reception, often hostile but later accommodating; and (3) the successful integration of immigrants and their children.

# 2.2 IMMIGRATION TRENDS AND ORIGINS FROM 1820 TO 2015

The United States began collecting data on the numbers and origins of arrivals by ship in 1820. This statistical series, published in the annual Yearbook of Immigration of Statistics by the U.S. Department of Homeland Security (DHS), is widely considered to be the standard account of immigration to the United States, even though the series provides an incomplete record of immigration for much of American history. For example, overland entries from Canada and Mexico were not counted until the early 20th century. In recent decades, the DHS figures are not the number of new arrivals but of persons receiving lawful permanent resident (LPR) status, commonly called receiving a "green card." More than 1 million persons receive LPR status each year, but the majority of these have already been in the United States, some for many years. In addition, many other new arrivals enter the United States on temporary visas to work, study, or accompany a family member who comes to work or study. In fact, LPRs and temporary students or workers are not entirely separate populations, since over half of new LPR visas each year are "status adjustments" received by persons who were already in the United States on another visa (or even without a visa). Despite these limitations, the DHS series is the most widely used source of data for measuring long-term flows of (legal) immigrants to the United States. Figure 2-1 shows the absolute number (in thousands) of arrivals/ LPRs based on the DHS data series with labels for the major immigration eras identified by Philip Martin (2013) in his Population Reference Bureau publication. We note that the spike in the numbers of new immigrants from 1989 to 1991 does not represent a surge of new arrivals but rather the change in legal status for the 3 million previously undocumented immigrants who received LPR status following the passage of the Immigration Reform and Control Act of 1986 (IRCA). Table 2-1 shows more detailed data on the specific countries of origin from the published DHS Immigration and Naturalization Service data series for each of the four periods identified in Figure 2-1 (the dates of Martin's periodization are slightly revised here to be consistent with the availability of DHS data by country of origin).

Based on the DHS data series, at least 74 million immigrants have arrived in the United States since 1820. There are only fragmentary counts of those who returned to their countries of origin or who died without leaving any descendants, but there is little doubt that almost all Americans are



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the products of immigration, past or present. Without a common ancestry (real or imagined) to claim, American identity has been forged by common experiences rather than descent. These common experiences of Americans are created and reinforced by public schools, military service, civic organizations, Hollywood images, political campaigns, and social movements.

The four periods represented in Figure 2-1 are (1) frontier expansion before 1880, (2) industrialization and the age of the Great Atlantic Migration from 1880 to 1929, (3) the immigration pause from 1930 to 1965, and (4) the post-1965 wave of migration from Latin America and Asia. Even though millions of migrants arrived in each period, the eras of industrialization and the post-1965 wave stand out as exceptional, with 23 and 35 million documented immigrants, respectively.

The absolute numbers of arrivals or immigrants represented in Figure 2-1 (and on which the percentages in Table 2-1 are based) are not adjusted for the size of the American population at the time. For example, the 1 million or more annual arrivals in the early 20th century—in a country of less than 100 million people—represented a larger change to the population base than the arrival of 1 million annual immigrants in the early 21st century when the U.S. population numbered more than 300 million. The next section of this chapter presents estimates of the net international migration rate relative to the national population. The first conclusion from Figure 2-1 is that the annual numbers of immigrants in the current period—the "post-1965 wave"—are not exceptionally different from the numbers during much of American history. The one period that is distinctively different is the 1930 to 1965 immigration pause (Massey, 1995). This era, often remembered with nostalgia by many older Americans as representative of the American past, is actually the most different with respect to the annual numbers (and percentage of the receiving population) of arriving immigrants.

Beyond the number of immigrants, it is helpful to survey the major trends and patterns that shape and describe immigrant flows. These include the factors that motivate long-distance migration; condition the reception of immigrants by the receiving population; and shape government policies that have encouraged, discouraged, and restricted immigration at various times (Hirschman et al., 1999; Massey et al., 1998; Portes and Rumbaut, 2014). Economic factors loom large among the many causes of international migration. As a frontier New World country in the mid-19th century, a rapidly growing industrial economy in the early 20th century, and a dynamic postindustrial economy in recent decades, the United States has always attracted immigrants (Easterlin, 1980). Long-distance migrants rarely come from the ranks of the successful; more often they have been peasants pushed off their lands by the commercialization of agriculture, workers who lost their traditional livelihood because of the

Region and Country of Last	Frontier Expansion	Industrialization	Pause	Post-1965 Era	All Periods
Residence	1820-1879	1880-1929	1930-1969	1970-2013	1820-2013
Total (%)	100.0	100.0	100.0	100.0	100.0
Europe	90.0	82.9	47.5	13.1	47.7
Northwestern Europe	52.2	13.8	14.3	3.0	13.8
Britain	19.5	6.7	8.4	1.9	6.3
Ireland	28.7	5.0	1.8	0.3	5.6
Scandinavia	3.6	6.1	2.1	0.3	2.7
Germany and Switzerland	31.8	7.1	14.8	1.3	8.3
Eastern Europe	1.2	33.4	4.8	5.0	13.1
Austria-Hungary	0.7	16.6	2.3	0.3	5.5
Poland	0.2	1.5	1.3	1.2	1.2
Russia	0.4	13.7	0.1	2.0	5.2
Southern Europe	1.3	22.5	11.2	2.3	9.2
Italy	0.7	19.0	7.2	6.0	7.0
Greece	0.0	1.9	1.9	0.5	1.0
Spain and Portugal	0.5	1.6	2.0	6.0	1.2
Asia	2.3	3.4	7.5	34.0	18.0
China, Hong Kong, Taiwan	2.3	0.4	2.0	9.9	3.7
Japan	0.0	1.2	1.2	0.8	6.0
Philippines	0.0	0.0	1.3	6.2	3.0
Korea	0.0	0.0	0.4	3.0	1.4
Vietnam	0.0	0.0	0.0	2.9	1.4
India	0.0	0.0	0.3	4.6	2.2

45.6 30.5 2.4 5.8 19.2 11.1	-	1.5 5.3 7.0 4.9 0.7 1.7 2.4 0.4 1.7 1.1 34,694 74,107	NOTE: Official recording of immigration to the United States began in 1820 after the passage of the Act of March 2, 1819. For the period 1820-1867, the data are for all immigrant alien arrivals. For the periods 1868-1891 and 1895-1897, the data are for all immigrant alien arrivals. For 1892-1894 and 1898-2013, the data represent immigrant aliens admitted for permanent residence. From 1892 to 1903, aliens entering by cabin class were not counted as immigrants. Land arrivals were not completely enumerated until 1908. Prior to 1906, the data are for country of origin, from 1906 to 2013, the data are for country of last residence. Because of changes in national boundaries, data for a particular country may not necessarily refer to the same geographic area over time. Only the largest countries from the source table are listed here, although the regional and subregional areas are inclusive for all new arrivals/immigrants from that area. The boundaries of most of Eastern Europe changed radically from the late 19th century through the early decades of the 20th century. Moreover, many new arrivals may have reported their national identities rather than the country or political unit from which they came. For complete details, see the 21 detailed footnotes to the source table.  SOURCE: This table is a summary of Table 2 of the Yearbook of Immigration Statistics: 2013 (U.S. Department of Homeland Security, 2014, pp. 6–7).
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#### THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

collapse of industries, and minorities who were fleeing religious or political persecution (Hatton and Williamson, 2008; Massey et al., 1998). Nor are migrants selected from the bottom of the socioeconomic spectrum in sending societies; instead, most migrants come from the middle ranks of the sending society. The poorest of the poor rarely become long-distance migrants because they lack the resources to cover the costs of transportation and initial settlement (Massey, 1999; Portes and Rumbaut, 2014, Ch. 3).

## Settling the Frontier: Immigration from Western Europe Prior to 1880

Before 1880, 90 percent of immigrants were from Europe, mostly from the United Kingdom, Ireland, and Germany (Table 2-1). Another 6 percent originated in Canada. There were smaller numbers from Scandinavia, the periphery of Europe, and China. Compared to the present, it might seem that the United States was a homogenous society for the first century after independence. This interpretation would, however, be a serious misreading of the deep racial and ethnic divides in 18th and 19th century America.

The first census in 1790 showed that 20 percent of the early American population was of African origin—90 percent of whom were slaves (Archdeacon, 1983, p. 25; Gibson and Jung, 2005, Table A.1). For the three centuries after European arrival in the New World, many more Africans crossed the Atlantic in chains than did free or indentured Europeans (Hatton and Williamson, 2008, p. 8). In addition, it should not be overlooked that Native American populations were demographically and politically ascendant in all of North America except the eastern seaboard (Snipp, 1989), even if they were not enumerated in early censuses. The conflicts and political struggles over slavery and white settlements on Native American lands were the major political issues in early American history.

In the 18th century, Americans often expressed intolerance of European groups that spoke other languages and followed different religious faiths than the majority. Benjamin Franklin complained that the "Palatine Boors" were becoming so numerous in Pennsylvania that they might be tempted to Germanize the resident population instead of the residents Anglifying them (Archdeacon, 1983, p. 20; Jones, 1992, pp. 39-40). The major immigration wave in the 1840s and 1850s, primarily of Irish Catholics fleeing the potato famine, sparked a nativist reaction, popularly known as the "Know-Nothing" movement (Higham, 1988, Ch. 2). In 1854, 6 governors and 75 members of Congress were elected from the Know-Nothing party on a platform of ending immigration (Archdeacon, 1983, pp. 81-82). Although nativism receded in the 1860s as the Civil War dominated domestic politics, the animosity against immigrants, and Catholics in particular, was a harbinger of what was to come.

# The American Industrial Revolution and Immigration from Southern and Eastern Europe, 1880 to 1924

The second historical period of immigration includes the last two decades of the 19th century and the first quarter of the 20th (Table 2-1 approximates this period with data from 1880 to 1929). Although most of the immigrants during this era crossed the Atlantic, there was also an important trans-Pacific flow of migrants from China and Japan to California. The first large-scale Chinese migration began in the 1860s and 1870s, and the 200,000 Chinese workers in California in 1880 made up nearly a quarter of the state's labor force (Bonacich, 1984). Fearing wage competition with Chinese workers, white workers in California, supported by unions and politicians, unleashed a vitriolic anti-Chinese campaign that led to the first ban on immigration of a national origin group—the so-called "Chinese Exclusion Act of 1882" (Chan, 1991). When Japanese began arriving in large numbers in the late 1890s and early 1900s, they were also met with racial hostility that soon led to a ban on immigration of Japanese workers with the "Gentlemen's Agreement" of 1907 (Daniels, 1962).

In the five decades from 1880 to 1929, more than 22 million immigrants arrived in the United States—a country that only numbered 50 million in 1880. Even more controversial than the numbers were the sources of the "new immigrants," as they were called. The earlier streams of Irish, British, and German immigrants gradually gave way to peoples from Southern and Eastern Europe, including more than 4 million Italians, 3 million people from the Russian Empire, another 4 million from the Austrian-Hungarian Empire, and millions more from other parts of Eastern Europe, Greece, Spain, Portugal, and Scandinavia. During this period, there were also sizable immigrant streams from the Americas, notably Canada, Mexico, and the Caribbean, as well as from Japan. Relative to the prior period (1820 to 1879), the age of the American industrial revolution (1880 to 1929) saw the fraction of immigrants from Northwestern European origins reduced from 52 to 14 percent, while the numbers from Eastern and Southern Europe soared from 2 to 55 percent.

Industrialization provided a propitious labor market for throngs of unskilled workers willing to accept jobs that were shunned by native-born Americans (Atack et al., 2000, p. 322; Carpenter, 1927, p. 271; Hirschman and Mogford, 2009). However, the differences in language, culture, and religion between new immigrants and the native-born population, combined with popular anxieties over the industrialization of the American economy, contributed to the formidable political backlash against Southern and Eastern European immigrants during the late 19th and early 20th centuries.

Anti-Catholic attitudes were a core feature of 19th century American culture, which sometimes seethed into mob violence (Archdeacon, 1983,

#### THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

p. 81; Daniels, 1991, pp. 267-268). The rising tide of 19th century nativism morphed into a pseudo-scientific theory of Anglo-Saxon racial superiority based on Social Darwinism (Higham, 1988). Premised on assertions that immigrants from Southern and Eastern Europe could not be assimilated into American society, academic treatises and popular writings alleged that these new immigrants would undermine American political and cultural values and lower the intelligence of the population. An unusual political coalition, including the Ku Klux Klan, Midwestern Progressives, and many prominent intellectuals joined the anti-immigrant hysteria (Higham, 1988, Ch. 1; Jones, 1992, pp. 228-230). In 1910, the Dillingham Commission, appointed by Congress, issued a 42-volume report, which avowed the racial inferiority of the new immigrants from Eastern and Southern Europe (Bernard, 1980, p. 492; Handlin, 1957, Ch. 5).

The Immigration Restriction League, founded by young Harvardeducated elites in 1894, advocated a literacy test to slow the tide of immigration from Southern and Eastern Europe, which allegedly were sending an "alarming number of illiterates, paupers, criminals, and madmen who endangered American character and citizenship" (Higham, 1988, p. 103). When the literacy test failed to stem the immigration tide, the restrictionists pushed for numerical caps on new arrivals that aimed to reduce if not eliminate immigration from undesirable origins. Congress passed a law in 1921 that restricted immigration to 3 percent of each nationality already in the U.S. population, based on the 1910 census. Seeking to tighten the screws, the Immigration Act of 1924 ("Johnson-Reed Act") lowered the quotas by restricting immigration to 2 percent of each nationality counted in the 1890 census—a date before the surge in immigration from Southern and Eastern Europe. Following vitriolic congressional debates about redistricting, the act was amended in 1929 to set quotas based on the "national origins" of the white U.S. population (Bernard, 1980, pp. 492-493; Jasso and Rosenzweig, 1990; Tienda, 2002).

The anti-immigrant prejudices also triggered scapegoating of immigrants as the alleged causes of a myriad of social problems, including crime, radical politics, labor unions, and disease. The "Red Scare" (directed at socialists and communists) during 1919 and 1920 led to the mass arrests and deportations of immigrants (Higham, 1988, pp. 222-233). In early 1920, Attorney General A. Mitchell Palmer directed federal agents to round up more than 6,000 "aliens" without warrants. Although most were eventually released, many "were detained for unjustifiably long times and some suffered incredible hardships" (Cohen, 1964, p. 73). Similar scapegoating episodes occurred in the 1930s when, in the depth of the Great Depression, President Hoover authorized repatriation of Mexicans without due process in order to reduce welfare rolls and open up deportees' jobs for American workers (Balderrama and Rodriguez, 1995). As Nazi Germany unleashed

an increasingly violent repression of its Jewish population during the 1930s, only a small number of Jewish refugees from Germany were allowed to enter the United States. Even as awareness of an approaching Holocaust of European Jewry spread, American immigration quotas, reinforced with anti-Semitism in the State Department, restricted any emergency response to accept more refugees (Breitman and Kraut, 1987; Zolberg, 2006).

## The Immigration Pause from 1924 to 1965

During the long hiatus in immigration, only 7 million LPRs were admitted (Table 2-1 approximates this period with data from 1930 to 1969). The Great Depression and World War II were key factors leading to the very low levels of immigration for the 1930s and 1940s. Moreover, the restrictive laws of the 1920s had dramatically lowered immigration with very small national origin quotas for Southern and Eastern European countries and quotas of zero immigrants from Asia and Africa. Consequently, almost half of the 7 million immigrants admitted during this period originated from Western Hemisphere counties, which were exempt from the national origin quotas. The largest influx was from Canada, but there were also substantial numbers from Mexico, the Caribbean, and South America. Strong social and economic ties between Mexicans granted U.S. citizenship by decree and Mexican citizens living south of the Rio Grande provided a foundation for sustained migrant flows even after the creation of the Border Patrol in 1924. In addition to those granted permanent residence, the United States authorized the entry of temporary workers from Mexico-popularly known as the Bracero program in 1942. More than 5 million Mexicans came to the United States as braceros between 1942 and 1964 (Massey et al., 2002); virtually all of the braceros returned to Mexico. There was also continued immigration from the few European countries that were given generous immigration quotas (Tienda, 2002).

The era from the 1920s to the 1960s was an important period for the integration and assimilation of Southern and Eastern European immigrants, and especially their children—the second generation—into the mainstream of American life (Alba and Nee, 2003). Against the backdrop of an often-hostile reception encountered by the new immigrants stands the remarkable social and economic progress of millions of immigrants from different cultural origins during the early and middle decades of the 20th century. Because new immigrants were considered a breed apart in the 1910s and 1920s, ethnic intermarriage rates were low and residential segregation levels were high (Lieberson, 1963; Pagnini and Morgan, 1990). Despite its many flaws, the Americanization movement did boost naturalization rates of immigrants and broaden educational opportunities for children of immigrants (King, 2000). By the 1950s, the children of early 20th century

## THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

immigrants had reached socioeconomic parity with other white Americans, residential integration was the norm in growing suburban areas, and ethnic intermarriage was unremarkable (Alba and Nee, 2003; Duncan and Duncan, 1968; Lieberson, 1980). During this period, World War II and the ensuing postwar economic boom (when all boats were rising) also played a role as an engine of integration over time. These trends continued and expanded during the second half of the 20th century to incorporate previously stigmatized immigrant and religious groups, including Catholics and Jews, into the social and economic mainstream. For much of the 20th century, the American commitment to diversity was limited to reserving one seat on the Supreme Court for a Catholic and another for a Jew—the implicit assumption was that without some sort of informal quota, minority religions would not be represented. In 2015, by comparison, all of the justices on the Supreme Court were Catholic or Jewish. This shift suggests that other factors, such as political ideology, are now more important than religion or ancestry.

#### The Post-1965 Immigration Wave from Latin America and Asia

The 35 million legal immigrants from 1970 to 2013 represent a new chapter in American immigration history, with more than 40 percent coming from Latin America and 34 percent from Asia (Table 2-1). The count of immigrants granted LPR status over this period includes 6 million from Mexico, 4 million from the Caribbean, 1.8 million from Central America, and 2.4 million from South America. Of the 12 million Asian immigrants granted LPR status since 1970, 2 million hail from China (including Taiwan and Hong Kong), another 3 million are from the Philippines, and more than 1 million each came from Korea, Vietnam, and India. Since 1970, more than 1.7 million immigrants from Africa were granted LPR status.

Although the popular response to the post-1965 immigration wave may lack the blatant expressions of vitriol that were common in early 20th century America, there are parallels between the anti-immigrant political movements then and now. Undocumented immigrants evoke considerable antipathy from political leaders and the media, including allegations that immigrants increase crime rates; spread communicable diseases; create congestion in schools, parks, and other public facilities; and deplete scarce natural resources (Bouvier, 1992; Chavez, 2008; Federation for American Immigration Reform, 2009; Massey and Pren, 2012). Prominent intellectuals and academics sometimes legitimately claim that the newcomers from Asia and Latin America cannot be assimilated (Brimelow, 1995). Singling out Latin Americans (and Mexicans in particular), Harvard political scientist Samuel P. Huntington (2004, p. 256) warned that the continued influx would eventually "change America into a country of two languages, two cultures, and two peoples." As in the past when anti-immigrant sentiment

mounted, Congress passed a series of punitive laws in the 1990s and 2000s, which permitted the deportation of aliens, including permanent residents, with little regard for due process. The arbitrary detention and deportation of many Muslim immigrants in the wake of 9/11 is similar to the forced repatriation of Mexicans during the 1930s and 1950s.

Beyond concerns about the impact of immigrants on the labor market and the fiscal system, some Americans believe that the large numbers of immigrants from "third world" countries are a threat to national identity and culture (National Academies of Sciences, Engineering, and Medicine, 2015, p. 50). Much of the outrage in the mass media is focused on undocumented immigrants and the problem of "broken borders," but the antipathy against illegal immigration often spills over to all immigrants, particularly during periods of economic recession (Chavez, 2008; Portes, 2007; Sanchez, 1999). In 1994, for example, California voters approved Proposition 187, which was intended to limit access to health care and public schooling for the children of undocumented immigrants. Another response to the perceived immigrant threat was the militarization of the Mexican border (Dunn, 1996) and the spending billions of dollars for border enforcement along the nearly 2,000-mile peaceful border (Massey et al., 2016).

#### 2.3 IMMIGRATION DRIVEN BY LABOR DEMAND

One of the major issues in immigration debates, past and present, has been whether migration is primarily a response to conditions in the countries of origin or to economic demand in the United States. Economic and demographic theory predict that both pushes and pulls are important, but there are other noneconomic factors influencing long-distance migration, including the social support from family and friends who have previously migrated (Massey et al., 1993), as well as immigrant admissions policies that emphasize family reunification. It is not so much a question of "either-or," but whether the magnitude of long-distance migration flows is responsive to labor demand and therefore "self-regulating" (at least in part), or whether immigration can only be controlled by restrictive policies (Hollifield et al., 2014).

The consensus of economic historians is that international migration before the 1920s was highly responsive to the economic demand for labor (Easterlin, 1968; Hatton and Williamson, 2008; Thomas, 1973). The restrictive immigration policies of the United States from the 1920s onward (and elsewhere in the world) reduced international migration to very low levels and ended the historic link between economic demand and the Atlantic migration system.

Following the immigration reforms in the 1960s, immigration levels increased from 1970 to the late 1990s and have oscillated since then at

relatively high levels compared with the decades immediately prior to 1970. However, there have been substantial swings in the national origins and composition of immigrant arrivals during the contemporary period of mass immigration. For example, the large influx of unauthorized migrants, especially from Mexico, appears to have slowed in the early 2000s and then declined after the Great Recession (Passel et al., 2013). The major wave of Korean immigration peaked in the 1980s, while immigration from China and India increased in the 1990s and 2000s (U.S. Department of Homeland Security, 2014, Table 2.1).

Changes in immigration and refugee policies have shaped much of the fluctuations in the most recent period, including expansion of temporary immigration of high-skilled workers under the H-1B visa program and increasing numbers of international students, both undergraduate and graduate, enrolling in American universities (see Section 5.6 in this report). These policies and programs reflect, at least in part, the high demand for highly skilled labor in STEM fields (science, technology, engineering, and mathematics) by American firms in the high tech sector and in research laboratories in universities and the private sector.

There is also a high demand for temporary labor by the American agricultural sector, which has led to the creation of the H-2A visa program. The significant flows of undocumented workers to low-wage jobs in domestic child care, agriculture, and construction signify a partial response to the demand for workers by employers and for services by households in the United States (Massey et al., 2002; Muller, 1993; Portes and Rumbaut, 2014). The dramatic reduction in the levels of unauthorized migration following the collapse of the construction industry during the Great Recession in 2007-2009 suggests a powerful feedback from economic conditions (Martin, 2013; Massey, 2012). As will be shown in a following section, immigrants and their children have comprised a growing share of the working-age population. With the impending retirements among the large population of Baby Boomers, immigrants will play an even larger role in serving the labor needs of economic growth.

#### 2.4 THE NET INTERNATIONAL MIGRATION RATE AND ITS CONTRIBUTION TO POPULATION GROWTH

The iconic portrait of immigration shown in Figure 2-1 represents only the inflow of LPRs to the United States. It does not include those coming on temporary visas to work or study nor those entering without authorization. Moreover, the DHS series does not include emigrants—the numbers of persons who depart from the United States each year. There has always been a substantial return migration of immigrants to their country of origin (Bandiera et al., 2013; Van Hook et al., 2006). More-

over, the absolute number of immigrants does not incorporate information on the size of the national population. The magnitude of immigration relative to the total resident population (sometimes labeled "the density of immigration") is a better reflection of the visibility of presence of newcomers and of their potential impact on the host society. Standard demographic measures are typically expressed in rates relative to the population per unit of time. Thus, the panel's preferred index of immigration is the "net international migration rate" (or the net immigration rate) defined as net international migrants (immigrants minus emigrants) for a time interval divided by the (average) total resident population for the same time interval.

However, the lack of direct and complete measurement of all persons who enter and leave the United States has meant that most research relies on the one-sided and partial DHS series of LPRs as the index of temporal flow of immigration to the United States. Demographers and economic historians have, however, made heroic efforts to estimate the net international migration rate based on incomplete data and indirect methods of estimation (Barde et al., 2006; Carter et al., 2006, Ch. 1, pp. 541-550).

Table 2-2 shows the best available estimate of the trend in the net international migration rate and the share of national population growth attributable to net immigration for each decade from 1790 to 2000 and annually from 2000 to 2013. The historical series from 1790 to 2000 was assembled by Michael Haines (2006) and published in the millennial edition of the Historical Statistics of the United States (Carter et al., 2006). Table 2-2 also includes U.S. Census Bureau estimates of the net international migration rate for each year from 2000 to 2013 (except 2009). Although the techniques of estimation used in the historical series and the Census Bureau estimates are somewhat different, they rely on a similar logic. Net international migration is measured as the residual for a specific time interval (decade or year) after subtracting natural increase (births minus deaths) from total population growth for the same time interval. This method is indirect, but components (population growth and natural increase) are better measured than are the actual numbers of immigrants and emigrants.

Despite the record numbers of immigrants admitted in recent decades (as shown in Figure 2-1), the net immigration rate in Table 2-2 shows that contemporary immigration is fairly modest when considered relative to the size of the total population. The highest rates of net immigration relative to the total population occurred neither in the early 20th century nor in the early 21st century but rather in the 1840s and 1850s. The net international migration rate was about 8 or 9 per 1,000 population during this time, falling to about 6 or 7 per 1,000 population from 1880 to 1920, and then falling further in the decades of the Great Depression, 1940s, and 1950s.

1 1 1

						Net International Migration	nal Migration
Time Period	Mid-Period Population (thousands)	Rate of Total Increase (per 1,000)	Crude Birth Rate (per 1,000)	Crude Death Rate (per 1,000)	Rate of Natural Increase (per 1,000)	Rate per 1,000	Percentage of Population Growth
1790-1800	4,520	30.1			26.5	3.6	11.9
1800-1810	6,132	31.0	I	1	26.9	4.2	13.5
1810-1820	8,276	28.6	I	I	24.7	3.9	13.7
1820-1830	11,031	28.9	I	I	26.8	2.1	7.1
1830-1840	14,685	28.3	I	I	23.5	4.8	16.9
1840-1850	19,686	30.7	I	I	22.4	8.3	27.0
1850-1860	26,721	30.4	I	I	20.6	8.6	32.3
1860-1870	35,156	23.6	I	I	17.4	6.3	26.5
1870-1880	44,414	23.1	41.2	23.7	17.5	5.6	24.2
1880-1890	55,853	22.7	37.0	21.3	15.7	7.0	30.9
1890-1900	68,876	19.0	32.2	19.4	12.8	6.2	32.6
1900-1910	83,822	19.4	29.8	17.3	12.6	6.9	35.3
1910-1920	100,546	14.2	26.9	15.3	11.6	2.6	18.1
1920-1930	115,829	14.5	23.2	11.6	11.5	3.0	20.5
1930-1940	127,250	7.3	19.5	11.1	8.4	-1.0	-14.0
1940-1950	139,928	13.9	23.1	10.5	12.6	1.3	9.6
1950-1960	165,931	17.1	24.8	9.5	15.3	1.8	10.4
1960-1970	194,303	12.7	20.1	9.4	10.6	2.0	16.1
1970-1980	215,973	10.3	15.4	6.8	6.5	3.8	37.0
1980-1990	238,466	6.6	15.8	8.7	7.2	2.8	27.9

#### THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

The net international migration rate rose from its very low levels during the middle decades of the 20th century to 2 per 1,000 in the 1960s—as the post-1965 immigration wave began. The net international migration rate then jumped to 3.8 per 1,000 in the 1970s, receded to 2.8 in the 1980s, and then increased to 4.8 per 1,000 in the 1990s. In the early 2000s, the rate fluctuated and then dropped to about 2.8 to 2.9 at the onset of the Great Recession in 2008. The rate appears to have stabilized around 3.1 to 3.2 from 2011 to 2013.

The current net international migration rate of one-third of one percent (3.3 per 1,000) per year is only half the level experienced in the prior period of mass migration, from 1880 to 1910. However, one aspect of contemporary immigration is higher than in prior periods of mass migration. During the post-1965 wave of immigration, net international migration has been a larger fraction of national population growth than it was during most earlier periods. The last column in Table 2-2 shows the ratio of net international migration to the total rate of population growth (either intercensal or annual)—which can also be expressed as the share of population growth due to net immigration. Since the 1970s, net immigration has been around 35 percent, and sometimes over 40 percent of total population growth. The ratio did drop below 30 percent during the 1980s and for a few years around the 2008 Great Recession, but immigration has been a major reason for the relatively high rate of population growth in the United States (compared to most other industrialized countries).

The explanation for the apparent anomaly of a historically moderate net international migration rate and a record-high contribution of immigration to national population growth is that other components of population growth have fallen to historically low levels. Over U.S. history, the rate of natural increase in the population (births minus deaths) has been steadily declining because the costs and benefits of large families changed for both native-born and foreign-born couples as the nation became more urbanized and industrialized. In addition, in an aging society deaths per thousand of population are also rising, which further depresses natural increase. In the past few years, the rate per 1,000 for natural increase has fallen below 5.0. As natural increase declined closer to the net international migration rate of around 3.0 per 1,000, the immigration contribution to total population growth has increased to roughly 40 percent, even though the numbers of immigrants per year was not increasing.

The post-1965 immigration wave coincided with the end of the Baby Boom, the transition to below-replacement fertility, and an aging population. Fertility in the United States has hovered around the replacement level of 2.1 births per woman for the past three decades, but fell after the 2007-2009 recession to 1.86 in 2013. With the total fertility rate of white non-Hispanic women, the largest ethnic group, consistently below 1.9, higher fertility among other groups, particularly Hispanics (roughly 2.8 prior to the recession, when it fell to 2.2), has helped to maintain the replacement level.¹ Overall, fertility of immigrant women is slightly higher than that of the native-born; however, the differential is small and typically narrows over time (Monte and Ellis, 2014; U.S. Census Bureau, 2014, p. 17). Even though the overall fertility rate has remained near replacement, the convergence of nativity differentials in childbearing behavior, combined with rising numbers of deaths from an aging population, portends slower future population growth even with high immigration levels.

# 2.5 PAST AND FUTURE TRENDS IN THE STOCK OF FIRST AND SECOND GENERATION IMMIGRANT POPULATIONS

Immigration effects are often viewed as due to not only the numbers of foreign-born alone (the first generation) but also their children born in the United States (the second generation). This section reviews the trends over time in the numbers of first and second generation individuals (see Box 2-1 on sources of data for these trends). The *stock* of the foreign-born in the total population at any moment in time represents the cumulative impact of prior waves of immigration, net of the deaths and the return migration of earlier immigrants. Changes in the size and composition of the stock of foreign-born across successive Decennial Censuses provide a portrait of the presence of immigrants and their children in American society.

Through the passage of generations, descendants of the foreign-born become part of the national population without any sense of being foreign or "other," but at what point does this happen? In this chapter, as in the broader research literature, the children of immigrants—the second generation—are considered part of the immigrant community (Carpenter, 1927; Hutchinson et al., 1956; Portes and Rumbaut, 2014). For the fiscal analysis accounting in Chapters 8 and 9, the education and other costs of dependent individuals in the second generation are included on the immigrant side of the ledger. However, the decision of where to draw the line on which generations are included in the immigrant community is somewhat arbitrary.

The children of immigrants, if born in the United States as most are, are native born by definition and, under the Fourteenth Amendment, are U.S. citizens at birth. Most individuals in the second generation adopt English as their primary language, and many of them marry outside their ethnic community (Lichter et al., 2011; Qian and Lichter, 2011). Yet, many if not most of the second generation are reared and socialized within the immigrant/ethnic sociocultural environment of their parents. Their family, religious, and community ties keep them attached to the immigrant experience. This

<sup>&</sup>lt;sup>1</sup>Fertility data are from Martin et al. (2015).

#### BOX 2-1 Sources of Data on Measuring First and Second Generation Stocks

Foreign birth was first included in the Decennial Census in 1850, and a question on birthplace of parents was first added in the 1890 census. Parental birthplace of parents was dropped from the 1980 and subsequent censuses. The Current Population Survey (CPS), a major Census Bureau survey, added a question on parental birthplace in 1994, but the CPS data are not exactly comparable to the Decennial Census data or to the American Community Survey (the replacement for detailed census data after 2000). The latest Census Bureau population projections do include estimates of the future foreign-born population. Because of the inconsistences in the census series and the lack of counts of the second generation, the data in this section use the adjusted population estimates and projections prepared by the Pew Research Center (2015a). These adjusted population series differ slightly from official census data because of methods of adjustment, estimation, and projection, but the differences are generally less than one percentage point.<sup>a</sup>

reality was a reason for the addition of the parental birthplace question to the Decennial Census a few decades after the question on foreign birth was adopted. In keeping with this line of reasoning, the panel considers both the first and second generations as part of the immigrant population.

Figure 2-2 shows the relative size—as a percentage of the total population—of first and second generation immigrant groups from the late 19th century to the early 21st century; these figures are based on historical Decennial Census data and Pew Research Center population estimates and projections. From 1860 to 1920, the foreign-born share of the U.S. population fluctuated between 13 and 15 percent. The second generation was larger, hovering around 20 percent of the total population. The size of the second generation population was a product of the high fertility rate of immigrants at that time, approximately twice what it is today (Morgan et al., 1994). Comprising upward of one-third of the population—one-half the population outside the South and a majority among city dwellers—in

<sup>&</sup>lt;sup>a</sup>All things being equal, one would ideally use "official" Census Bureau estimates and projections. However, the Pew estimates include first, second, and third generation<sup>b</sup> components, while the Census Bureau only includes first and second-and-higher generational data. Since the panel considers the second generation as part of the larger "immigrant population community," this tips our decision in favor of using the Pew Research Center data.

<sup>&</sup>lt;sup>b</sup>As noted at the beginning of Chapter 1, this report uses "third-plus generation" as shorthand for all U.S. residents whose parents are native-born U.S. citizens (sometimes called "third and higher generation").

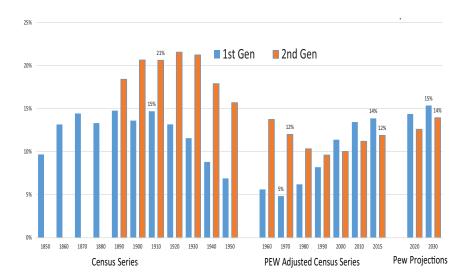


FIGURE 2-2 Percentage of first and second generations in the U.S. population, 1850-2030.

SOURCE: Pew Research Center (2015a).

the early decades of the 20th century, immigrants and their children were a highly visible presence in schools, workplaces, and American politics (Hirschman, 2005).

With the passage of immigration restrictions in the 1920s, followed by the Great Depression in the 1930s and World War II in the 1940s, the flow of immigrants dropped to record lows (Figure 2-1). The decline in the stock of the foreign-born population lagged the drop in flows but followed the same temporal trend, reaching a low of less than 5 percent in 1970. During the long immigration pause in the mid-20th century, the decline of the stock of second generation followed suit with a lag, reaching a low of 12 percent in 1970 and 10 percent in 1980. In the early 20th century, the center of gravity in immigrant communities was in the working-age first generation and their youthful progeny. By midcentury, the foreign-born population was diminished by the lack of new arrivals and a rising death toll among this aging population. The second generation was somewhat younger, but its ranks also began to shrink during the middle decades of the century as that population aged and the fertility of the foreign-born population fell.

The 1965 Immigration Act is typically used to date the beginning of a new era of mass immigration. But implementation of the new immigration quotas was delayed for several years, and it might be better to consider

#### THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

1970, which recorded the nadir in the size of the foreign-born population, as the start of the new age of mass migration. The absolute size of the foreign-born population rose from less than 10 million in 1970 to 45 million in 2015, while the fraction of foreign-born in the total population rose steadily to reach 14 percent in 2015—slightly below the levels experienced a century earlier. The significance of the second generation is obscured in Figure 2-2 because the rising numbers of children of the post-1965 immigrants are counterbalanced by deaths among much older members of the second generation, who were the children of early 20th century immigrants. Since 2000, however, the "new" second generation has expanded rapidly from 24 million in 2000 to 38 million in 2015 (that is, from 10% to 12% of the population). At present, in 2016, one in four Americans is an immigrant or the child of an immigrant.

Before discussing the projections of the future stock of foreign-born in Figure 2-2, it is useful to review the dynamics of recent immigration since the Great Recession. In the early 2000s, immigration continued at more or less the same pace as in the immediately prior decades. Data from the American Community Survey (ACS) showed a continued rise in the foreign-born population, as did the estimates of the undocumented immigrant population, which reached a peak of 12.2 million in in 2007 (Passel et al., 2013). However, there were signs that Mexican immigration was beginning to decline in the early years of the decade (Passel et al., 2013). For the last three decades of the 20th century, Mexican immigration, much of it unauthorized, had been the largest component of the post-1965 immigration wave. The slowdown in Mexican immigration has several sources. The deep-rooted cause is slower growth of the Mexican population in the young working ages due to sharp fertility declines in the 1980s and 1990s. Mexico's total fertility rate plunged from 6.8 births per woman in 1970 to 2.2 by 2006 (Johnson and Stoskopf, 2010). When children of the high-fertility era came of age between 1980 and 2000, a very large wave of young people sought job opportunities across the border in Texas and California, later dispersing across the United States. After 2007, owing in part to Mexico's fertility decline, relatively fewer young people pursued jobs in the United States; with an improved Mexican economy, many more were absorbed into the workforce at home.

Despite the huge increase in personnel and other costs of border enforcement, the size of the foreign-born Mexican-origin population in the United States increased from 2.2 million in 1980 to 11.7 million in 2010 (Greico et al., 2012). A little more than half the foreign-born Mexican-origin population currently in the United States may be unauthorized (Passel et al., 2013). Massey and Pren (2012) have argued that the hardening of the U.S.-Mexican border had a modest impact on the likelihood of young Mexicans crossing the border, but it raised the costs of doing so and there-

fore discouraged return migration once migrants had entered the United States. Traditionally, much of migration from Mexico to the United States had been circular, often traveling for seasonal employment and with only a minority settling permanently in the United States. With the higher costs of border crossing, however, many young Mexican workers opted to settle permanently in the United States rather than risk detection by undertaking multiple crossings. Thus the border hardening yielded the unexpected result of increasing the immigrant population of Mexican origin, and their subsequent children, who permanently resided inside the United States.

The impact of the 2007-2009 Great Recession on Mexican migration was qualitatively different from that of prior downturns. The effects of the high unemployment rate, including the especially sharp decline in construction jobs, which had often been filled by Mexican immigrants, caused the net migration rate from Mexico to fall to zero, or perhaps even to turn negative, as the numbers of returning migrants equaled or surpassed those of new arrivals (Passel et al., 2013). A recent report by the Pew Research Center claims that since 2009, more Mexicans left the United States than entered—reversing the direction of the largest single-country flow since 1970 (Gonzalez-Barrera, 2015). Contributing to this overall decline in Mexican immigration has been a drop in the absolute number of undocumented immigrants in the United States in part due to an increase in their removals and deportations (Massey and Pren, 2012).

Since 2000, even as immigration from Latin America, and Mexico in particular, was decreasing, an increasing share of immigration has come from Asia. In absolute numbers, recent arrivals over the prior 5 years from Asia rose from 323,000 in 1970 to 2.5 million in 2013 (Pew Research Center, 2015a, pp. 36-37). Since 2008, various measures have shown more Asian immigrants arriving in the United States than Hispanics). Recent data, however, show that increases in immigration from Central America have reduced the gap between Asian and Hispanic immigration (ibid).

To summarize, there seem to be two distinct periods of immigrant flows into the United States during the early 21st century. The first was from 2000 to 2007, when the foreign-born population continued the high pace of arrivals recorded in the 1990s. The second period began after 2008, when the recession caused a sharp slowing of immigration from Mexico and Latin America. The economic conditions that dampened the flows of unauthorized immigration have had much less impact on legal immigration based on family reunification, much of which is coming from Asia.

The Pew Research Center projections in Figure 2-2, which incorporate the recent slowdown in unauthorized migration, show only modest increases in the size of the foreign-born population from 45 million in 2015 to 48 million in 2020 and to 57 million in 2030. The share of the foreign-born as a fraction of the total population is predicted to rise slowly to 14

percent in 2020 and to 15 percent in 2030. These projections are roughly comparable to those published by the Census Bureau, but there are minor differences in methods and assumptions (Pew Research Center, 2015a, Ch. 2; U.S. Census Bureau, 2014). The second generation is predicted to rise to 13 percent in 2020 and 14 percent in 2030. Whereas the projected share of the foreign-born in the total population is comparable to the actual share a century earlier, the share of the second generation is projected to be roughly half as large as a century ago, due to the much lower fertility of immigrants today.

#### 2.6 IMMIGRATION AND CHANGES IN RACE AND ETHNIC COMPOSITION

Immigration has been the major demographic driver of changes in the racial and ethnic composition of the U.S. population since the settlement of North America several centuries ago (Klein, 2004). However, for much of the country's history, the diversity of its population was not measured because of the limited scope of questions in the Decennial Census. For example, Native American populations were only enumerated after they were settled on reservations or in government-administered areas. Religion has never been included in Decennial Censuses. While the list (and definition) of racial and ethnic groups has varied considerably over the past two centuries, ethnic differentiation within the white population was not measured in Decennial Censuses from 1850 through 1970, a period when much of the concern about immigration was driven by diverse countries of origin among white European immigrants.

Table 2-3 shows the racial and ethnic origins of the resident American population in 1900, 1970, 2000, 2010, and 2014. In 1900, the United States was in the middle of the peak years of immigration from Southern and Eastern Europe, while 1970 was just before the massive contemporary wave of immigration from Latin America and Asia. The racial and ethnic classification in Table 2-3 is a blend of pre-2000 and post-2000 categories, with the following major groups: White (non-Hispanic), American Indian/ Alaskan Native (non-Hispanic), African American (non-Hispanic), Latino/ Hispanic/Spanish, Asians and Pacific Islanders (non-Hispanic) and "mixed race" (non-Hispanic). Data on persons with multiple race identities (two or more races) were first available in the 2000 Decennial Census and starting in 2003 in the CPS.

Almost half of Hispanics report themselves to be white, and about one-third write in a Hispanic national origin category in response to the race question. In Table 2-3, all Hispanics, regardless of their response to the race question, are classified as "Latino/Hispanic/Spanish." The 1900 and 1970 data are based on public use microdata derived from the Decennial

continued

5.6

5.1

1.2

0.1

Asian American & Pacific Islander

0.2

0.0

1st and 2nd generation

3rd-plus generation (non-Hispanic)

0.5

0.44.7

	Percentage Distribution	tribution			
Race and Ethnic Identity	1900	1970	2000	2010	2014
White (non-Hispanic)	87.3	83.3	9.69	64.0	62.3
3rd-plus generation	53.8	0.69	62.4	57.4	56.1
1st and 2nd generation	33.5	14.3	7.2	6.7	6.3
American Indian/Alaskan Native (non-Hispanic)	0.3	0.3	1.0	0.7	8.0
African American (non-Hispanic)	11.7	10.9	12.9	12.0	12.1
3rd-plus generation	11.7	10.7	11.4	10.4	10.1
1st and 2nd generation	0.1	0.3	1.5	1.6	1.9
Latino/Hispanic/Spanish	0.5	4.6	11.5	16.4	17.3
3rd-plus generation	0.2	2.1	3.1	4.5	5.1
1st and 2nd generation	0.3	2.5	8.5	11.9	12.2

16,115 195,399 175,717 19,682 2,448 37,783 31,738 6,045 54,253 38,139 100.02014 2014 174,537 2,234 4,968 20,277 36,589 31,621 49,797 13,687 36,109 94,814 100.02010 2010 0.3 19,869 171,359 191,228 31,660 2,801 35,424 31,311 4,113 8,384 23,276 100.0 2000 2000 Y Y Z Z 9,289 169,435 140,334 29,101 22,257 21,731 526 4,292 691 100.0 Population Count (thousands) 1970 1970 Ϋ́ Z NA V Percentage Distribution 40,433 25,204 8,810 8,761 49 146 255 65,637 196 401 100.0 1900 1900 Z Z Z American Indian/Alaskan Native African American (non-Hispanic) TABLE 2-3 Continued Mixed Race (non-Hispanic) Race and Ethnic Identity 1st and 2nd generation 1st and 2nd generation 1st and 2nd generation Latino/Hispanic/Spanish Race and Ethnic Identity 1st and 2nd generation 3rd-plus generation 3rd-plus generation White (non-Hispanic) 3rd-plus generation 3rd-plus generation (non-Hispanic) TOTAL

		12,39/	13,400	0.1.66./.1
(non-Hispanic) 3rd-plus generation	495	1.339	1.285	1,496
		10061	3) 16	6
1st and 2nd generation 111	1,970	12,258	14,200	16,014
Mixed Race (non-Hispanic)			5,362	6,005
3rd-plus generation			4,302	4,654
1st and 2nd generation			1,060	1,349
TOTAL POPULATION 75,186	203,302	274,709	304,282	313,395
NOTE: For this table, the categories of White, American Indian, Asian American, and Pacific Islander exclude those identified as Hispanic, to avoid double-counting. All those who identified as Hispanic are included in the category for Latino/Hispanic/Spanish. In this table as throughout the report, "3rd-plus generation" refers to all U.S. residents with two native-born parents.	Asian American, a d in the category fo	nd Pacific Islander exch r Latino/Hispanic/Spani	ide those identified as H sh. In this table as throu	ispanic, to average to the report of the rep
SOUNCES: 1900 and 1970 Decennal Census Public Use Microdata Sample file, available: http://www.ipums.org/usa/ [November 2016]. 2000 CPS from Merged 1998 to 2002 CPS Public Use Microdata Sample file, available: https://cps.ipums.org/cps/ [November 2016]. 2010 and 2014 CPS Public Use Microdata Sample file, available: https://cps.ipums.org/cps/ [November 2016].	iata Sample file, av: file, available: htt g/cps/ [November ]	allable: http://www.lpur ps://cps.ipums.org/cps/ 2016].	ns.org/usa/ [November . [November 2016]. 2010	2016]. 2000 ( ) and 2014 (

Censuses for those years, while data for 2000, 2010, and 2014 are based on the CPS. Within each ethnic-origin category (except American Indian), the third-plus generation<sup>2</sup> population is distinguished from the combined first and second generation (immigrant stock) population.

One indicator of the long-resident U.S. population of European origin is the category in Table 2-3 for third-plus generation non-Hispanic white. This group's share of the total U. S. population has hardly changed from 1900 to 2014. Just over half of the American population (54%) was in this category at the turn of the 20th century, and the share was only slightly higher (56%) in 2014.

In 1900, about 12 percent of the U.S. population was of African (or part African) origin. Because most African Americans lived in the South prior to the Great Migration (from 1915 to 1960), they had only a small presence in the rest of the nation—generally only a few percentage points. Other minority groups, including Native Americans, Hispanics, and Asians combined, comprised only 1 percent of the total population in 1900.

The major source of ethnic diversity in 1900 was within the white (European-origin) population. About one in three Americans in 1900 consisted of whites who were foreign born or had at least one foreign-born parent. This fraction rose to almost half of the population outside the South and to a substantial majority of the population in the largest cities. As discussed earlier, many old stock Americans considered immigrants of Eastern and Southern European origin to be socially and racially inferior. During this period, the Daughters of the American Revolution and similar groups were organized to stress their ancestral origins and to distance themselves from the new immigrants. College fraternities and sororities, social clubs, and many professions established racial, religious, and ethnic barriers to exclude the new immigrants and their descendants (Baltzell, 1964; Lieberson, 1980).

During the middle decades of the 20th century, the second generation (and much of the first generation) population assimilated into American life. Through generational succession, immigrant communities became ethnic communities (often of mixed ancestry) that celebrated their roots through memory, cuisine, annual festivals, and embellished Hollywood stories. Through intergenerational economic mobility and broadly shared economic prosperity, most of the children and grandchildren of Italian, Irish, and Eastern European immigrants joined the American middle class. Rather than the pressurized assimilation endured by their parents during the Americanization movement of the early 20th century, economic integration and social mobility of children and grandchildren of Eastern and

<sup>&</sup>lt;sup>2</sup>As noted in Chapter 1, throughout this report "third-plus generation" is used as shorthand for all U.S. residents whose parents are native-born Americans.

Southern Europeans were facilitated by postwar economic growth, the GI Bill for World War II veterans, the expansion of public higher education, and suburban development (Alba and Nee, 2003; Duncan and Duncan, 1968; Katznelson, 2005; Lieberson, 1980).

With the gradual acceptance of the descendants of Southern and Eastern Europeans as part of the majority white population, the U.S. ethnoracial landscape in the post-World War II era was focused on the black-white divide. By the 1970 Decennial Census, fully 94 percent of the population self-identified as either white (83%) or African American (11%). For African Americans, who had long been denied equal opportunity on the basis of skin color, the Civil Rights Movement of the 1950s and 1960s was the struggle to redress more than two centuries of segregation and governmentsanctioned discrimination. The Great Migration of African Americans to cities in the Northeast and Midwest and to some places on the West Coast made the black-white divide a national issue. Although geographically concentrated in a few major cities and states (California, New York, and Texas), by 1970 the growing Latino presence was felt as activists demanded ethnic identification and social recognition (Mora, 2014).

The 1965 amendments to the Immigration and Nationality Act replaced the infamous, restrictive immigration quotas by national origin of the Immigration Act of 1924 with a preference system based on principles favoring family reunification and certain highly skilled professions. Although Congress may have assumed that there would only be modest increases in the numbers of immigrants and their composition following the 1965 changes in immigration law, the long-term impact was to open the door to a new wave of mass immigration. Not only did annual immigration flows increase but the annual flows of legal immigrants from Asia surpassed that of legal immigrants from Latin America within a dozen years (Tienda, 2015). A less documented trend is a shift in the age composition of LPRs toward older ages, which is a predictable outcome of expanding the definition of immediate family members to include parents (Carr and Tienda, 2013). Accompanying these shifts in legal immigration was the advent of large-scale settlement of undocumented immigrants, mainly from Latin America. By the early 2000s, the numbers of new arrivals of unauthorized immigrants exceeded arrivals of legal immigrant in some years (Passel and Suro, 2005, p. 5).<sup>3</sup>

This wave of immigration from Latin America and Asia gained momentum during the last quarter of the 20th century and into the 21st cen-

<sup>&</sup>lt;sup>3</sup>For additional detail on changes in the unauthorized population, see Figure 1-17, which charts the number of undocumented immigrants in the United States from 1990 to 2013, and surrounding discussion in the report of our sister panel (National Academies of Sciences, Engineering, and Medicine, 2015).

tury, further diversifying the U.S. population. The number of Hispanics expanded fivefold from less than 10 million in 1970 to more than 50 million in 2014—representing about 17 percent of the total population. Asians and Pacific Islanders have had an even higher rate of growth—from 1.5 million in 1970 to 17.5 million in 2014—and currently represent over 5 percent of U.S. residents. Assuming the current mix of immigrants continues, Pew Research Center (2015a, p. 119) population projections suggest that Asians could comprise 14 percent of the U.S. population by 2065 and Hispanics 24 percent.

Immigration is driving the increase in population diversity. As shown in Table 2-3, about two-thirds of all Hispanics and 9 in 10 Asian and Pacific Islanders are either foreign born or children of immigrants. Since 1970 there has been an important but much smaller increase in the African American population of immigrants and the children of immigrants.

U.S. population diversity now commands the attention of politicians, bureaucrats, and the general public as electronic and print media report new demographic milestones, such as the rise of majority-minority states and localities. Table 2-3 shows that the percentage of the non-Hispanic white population, which was 87 percent of the total population in 1900 and still 83 percent in 1970, declined to just 62 percent by 2014. The Census Bureau projects that by 2060 non-Hispanic whites will represent 43 percent of the U.S. population (Colby and Ortman, 2015, p. 9; also see Pew Research Center, 2015a).

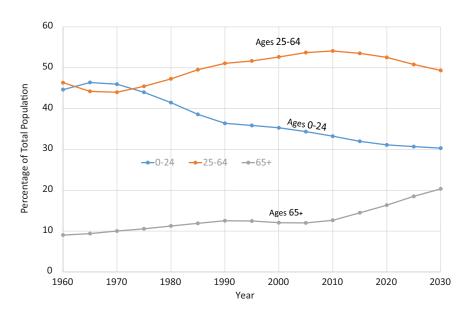
These projections rest on several arbitrary assumptions about the nature of race and ethnic identities, mainly that racial groups can be defined in categories that are mutually exclusive and not overlapping, and foremost for projections, that the membership in these categories remains distinct over several decades. Given the overlap that already occurs between those who identify as Hispanic and also identify with one of the "race" categories, as well as the trend toward more intermarriage across these ethnoracial boundaries, projections by race and Hispanic origin must rely on today's categories, which are increasingly hypothetical for the future. Perhaps they are best thought of as projections of the future population based on the predominant "origins" of that population as represented in today's categories. Predictions about the future ethnic composition of the United States certainly should not be treated as projections of the identities that will be expressed by future residents of America.

#### 2.7 POPULATION AGING, THE BABY BOOM, AND THE TRANSITION TO AN IMMIGRANT WORKFORCE

The age structure of a population, the relative shares of old and young, has an important influence on economic welfare, social mobility, and the resources available to support the elderly and children. At a given time, the age structure of a population is a reflection of the numbers of births in prior years and their survival, as well as the volume and age composition of immigrants. The most important of these factors is fertility. Societies with high fertility rates invariably have youthful populations with high fractions of children, adolescents, and young adults. Low-fertility societies have larger fractions of older persons, including the elderly.

The Baby Boom, those Americans born from the late 1940s to the mid-1960s, actually reversed the aging of the American population for several decades. The very large birth cohorts during this period rippled through the age structure of the American population over the past half-century. This trend is shown in Figure 2-3 with the fraction of the national population in three broad age categories of 0-24, 25-64, and 65 and above, from 1960 to the present and then projected to 2030 based on the Pew Research Center's population estimates and projections (Pew Research Center, 2015a).

The most distinctive feature of the population in 1960, at the peak of the Baby Boom, was the relative abundance of children and youth and the relative scarcity of the elderly. With less than 1 in 10 Americans above age 65, the costs of Social Security (and Medicare, which was implemented



**FIGURE 2-3** Change in age composition of U.S. population from 1960-2030 (projected).

SOURCE: Pew Research Center (2015a).

in 1965) were easily covered with modest levels of taxation. The costs of youthful dependents, for schooling in particular, were substantial, but the benefits were broadly distributed to most households with children. The costs of child care were primarily borne by families and by women in particular.

The population share of children and youth fell sharply by 10 percentage points from 1970 to 1990 and has continued to decline, but more gradually, in recent years. The share of the elderly has increased very slowly over the same period, rising from 9 percent in 1960 to 12 percent in 2005. However, the rate of change in population aging has accelerated in recent years, and the share of elderly is predicted to reach 16 percent in 2020 and 20 percent in 2030. The population share in the prime working ages, 25-64, rose for several decades after 1970 and was about 54 percent of the total population from 2005 to 2015. As the large Baby Boom cohorts—those born from 1946 to 1964—become senior citizens in the years following 2010, the population share in the prime working ages will decline, dropping below 50 percent by the late 2020s.

Changes in the age structure and the growth of the elderly population exert a fundamental constraint on public finances. In a "pay as you go" system, public funds for the elderly are a function of the generosity of the program, taxes paid by the working population, and the relative numbers of workers and beneficiaries. In essence, the support of dependent-aged populations rests on the number of working-age Americans. Figure 2-4 displays the ratio of seniors ages 65 and older to working ages 25 to 64, in a variation of demographers' traditional old-age dependency ratio, but with working age beginning at 25. Of course, people ages 18 to 24 also can be workers, but in modern postindustrial nations more often they are of "training age," enrolled in higher education or engaged as interns and apprentices, and so they are not yet productive enough to contribute to supporting the seniors. Similarly, people over age 65 also can be workers themselves, but retirement follows for most soon after this age, and old-age support programs have eligibility at 65 (Medicare) and 67 (Social Security's full retirement age).

What is most striking about Figure 2-4 is that the senior ratio (sometimes called the old-age dependency ratio) remained relatively constant, with between 19 and 24 seniors per 100 working-age population, from 1960 to 2010, after which it is projected to rise sharply (based on the Pew 2015 projection data). The oldest Baby Boomers crossed the age 65 threshold in 2011, and by 2015, the ratio has already climbed to 27.1. In the next 25 years, by 2040, the ratio is projected to reach 44.0. This increase of 16.9 in the senior ratio reflects the growing weight of the entitlement programs carried by a relatively smaller working-age population.

The current level of youthful immigration to the United States is not sufficient to completely reverse population aging or to rejuvenate low-

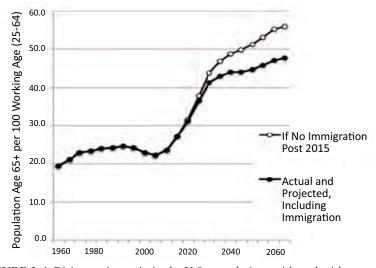


FIGURE 2-4 Rising senior ratio in the U.S. population, with and without projected immigration.

SOURCE: Myers (2012) and unpublished estimates by Pew Research Center (2015a).

fertility populations (Schmertmann, 1992; United Nations Population Division, 2001). As noted earlier, 1 million new immigrants per year is less than one-third of 1 percent of 300 million people that comprise the American population. But the small effect of immigration on population aging is not inconsequential (Lutz and Scherbov, 2006). To demonstrate the impact of immigration on population aging, one can compare old age ratios in projections that include or exclude immigration using the method developed by Myers (2012). If one hypothetically removes immigration after 2015, including the future descendants of those immigrants, it is possible to compare the future changes in the senior ratio over several decades. These data have already been applied in Figure 2-4, but the calculation of how large a difference immigration makes requires more detail.

As demonstrated in Table 2-4, population projections can be compared for the key ages with and without immigration. Without any immigration after 2015, the older population grows to a ratio of 55.9 seniors per 100 working-age adults in 2065, compared with 47.5 if immigration is included. Even in the first 25 years, by 2040, the ratio without immigration is projected to reach 48.8, an increase of 21.7, versus an increase of 16.9 if immigration continues as projected. In effect, already by 2040, the absence of immigration in the population projection would lead to growth of the senior ratio that is about one-quarter (28.1%) greater than if immigration

2015-20.47 28.82 40.81 2065 Growth in Ratio 3.52 7.11 101.61 2040-2065 28.17 16.94 2015-2040 21.71 TABLE 2-4 Population Aging in Projections That Include or Exclude Immigration 47.52 55.87 2065  $(65+/25-64 \times 100)$ Senior Ratio 43.99 48.77 2040 27.05 27.05 2015 88,469 101,333 158,345 213,252 2065 Population (thousands) 82,512 187,554 80,278 164,620 Assuming No Immigration 2015 to 2065 SOURCE: Pew Research Center (2015a). 2040 Percentage Change in the Senior Ratio Including Projected Immigration in the Absence of Immigration 46,853 173,195 173,195 46,853 2015 65 and older 65 and older 25-64 25-64

proceeds as projected and, after 50 years (by 2065), it would increase this indicator of aging by 40.8 percent. Clearly, immigration cannot fully stop population aging, but it can partially slow its effects. As can be seen in the table, immigrants (and descendants) add to the working-age population much more than to the elderly population. Not all grow old at once, and even after immigrants age, their children continue to pay a dividend toward old age support.

Belonging to the working-age population does not directly translate into employment—this depends on labor force behavior. In general, foreignborn men are slightly more likely to be employed than their native-born peers, especially after the first few years of adjustment following immigration (Duncan and Trejo, 2012; National Academies of Sciences, Engineering, and Medicine, 2015, Ch. 6). The gap is widest among men with a high school or less than high school education. Over a quarter of low-educated men in the third-plus generation are not employed, whereas the employment-to-population ratio of foreign-born men is very high across the education spectrum. The difference in employment ratios between foreign-born and native-born men is due mainly to differences in labor force participation and not to unemployment. Native-born men have some options—advanced education, early retirement, disability—that are not as readily available to foreign-born men, especially those who are unauthorized immigrants.

Among women, larger nativity differentials in labor force participation are common. Immigrant women are somewhat less likely (about 5 to 10 percentage points) to be employed than their third-plus generation peers in the same racial and ethnic group (the pattern is reversed for those with less than a high school education). The main differences in employment here are due to the high percentage of immigrant women staying home with young children; their labor force participation rate now resembles that of native-born females during the 1970s (which was much higher than it had been, say, in the 1950s, but still far from its peak around the year 2000). Second generation women are, however, just as likely to be working as their third-plus generation peers (National Academies of Sciences, Engineering, and Medicine, 2015, Ch. 6).

As the Baby Boom cohorts age and exit from the labor force in the coming decades, immigrants and their children will play an even larger role in the American economy. To provide an historical perspective on future trends, Table 2-5 and Figure 2-5 report the net population change (in thousands) in the working-age population, ages 25-64, by immigration generation for each decade from 1960 to 2010, with projections added for 2020 and 2030 (Pew Research Center, 2015a). The net change in the working-age population is the balance between the numbers turning age 25 (new entrants) relative to those turning age 65 (those exiting) during the decade. Among the first generation, net change is the inflow of new

	Net Change	in Resident Worki	ng-age Population	(thousands)
		Immigrant Generation		
Time Period	Total	First	Second	Third-plus
1960 to 1970	6,317	-526	-1,949	8,793
1970 to 1980	17,195	2,597	-3,092	17,690
1980 to 1990	22,373	5,346	-2,564	19,591
1990 to 2000	19,637	8,703	-920	11,854
2000 to 2010	19,243	9,576	1,462	8,205
2010 to 2020	8,992	4,548	3,954	490
2020 to 2030	2,009	2,093	6,939	-7,022

SOURCE: Pew Research Center (2015a).

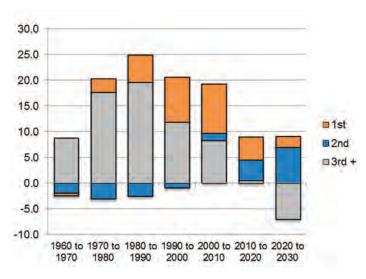


FIGURE 2-5 Net change in working-age population each decade, by immigrant generation (in millions) from 1960-1970 to 2020-2030. SOURCE: Table 2-5 data, Pew Research Center (2015a).

immigrants minus the number of retiring or departing migrants. Among the second and third-plus generations, net change is driven by the size of cohorts that were born 25 years earlier relative to those born 65 years ago (those entering and leaving the working-age population). A large wave of new immigrants and their childbearing will trigger a subsequent large wave of births of second generation children, who will become workers approximately two decades later.

From 1960 to 1970, the working-age population grew by a little more than 6 million—a slow expansion driven by the relatively small birth cohorts that occurred in the late 1930s and early 1940s. The figure of 6 million additional working-age people reflects the balance of a net increase of almost 9 million in the third-plus generation population and a net decrease of almost 2.5 million in first and second generation populations. These figures reflect the mortality experience and aging out of the workforce (attaining age 65) of immigrants and children from early in the 20th century, before the long immigration pause. In short, the foreign-born population in 1960 was composed mainly of the elderly survivors of the early 20th century immigration. The figure of 6 million persons added to the working-age population during the 1960s is dwarfed by the population changes that follow over the next few decades.

Between 1970 and 2010, the working-age population expanded by about 20 million net workers each decade. From 1970 to 1990, the growth was entirely due to Baby Boom cohorts in the third-plus generation reaching working age. Immigration added to the ranks of potential workers, but much of the increase was canceled out by aging of the second generation (i.e., children of early 20th century immigration). Subsequently, in the last decade of the 20th century, the share of the increase in working-age population due to net immigration rose, not only because the inflow of immigrants increased but also because the additions to the third-plus generation of working age slowed to only 12 million.

The 2000 to 2010 decade was a transitional period in terms of the share of growth in the working-age population contributed by immigrants. Overall growth held steady, with an increase of 17 million persons ages 25 to 64, but the increase from the third-plus generations slowed to 8 million, while the first and second generation working-age population increased by 9.5 and 1.5 million, respectively. These trends have accelerated since 2010 and are projected to continue through the 2020s. Growth of the third-plus generation is all but vanishing, with almost all of the 9 million net additions to the working-age population coming from the ranks of the first and second generations. The high relative growth of the second generation reflects the increases in immigration after 1970; the children of those immigrants are now coming of age, and new immigrants continue to make net additions to the working-age population.

#### THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

The decade after 2010 marks a major turning point. The leading edge of the Baby Boom generation is aging into the retirement range (turning 65 and older), and their numbers are approximately equal to entry of younger third-plus generation persons in the working ages. Overall, the net growth of potential workers (ages 25-64) among third-plus generation cohorts will shrink to less than half a million from 2010 to 2020. At the same time, the Pew Research Center projections suggest that the net increase in the number of working-age foreign-born will also slow, falling by half between the decades 2000-2010 and 2010-2020. However, the second generation—the children of the post-1965 wave of immigrants—are projected to add almost 4 million net entrants to the working-age population, a much greater number than in earlier decades.

After 2020, the aging of the Baby Boom generation from 2020 to 2030 will begin to drain the potential workforce drawn from the ranks of the third-plus generation; a net departure from the working-age population of over 7 million is expected. From 2020 to 2030, modest growth of the population ages 25 to 64—projected as a net gain of only 2 million persons—will result because of the growth of the first and second generation population segments. Based on the projections by the Pew Research Center (2015a), the net gain of potential first generation workers will slow to 2 million in the 2020s. This number is less than half that of the 2010-2020 decade and lower than any decade since 1970, reflecting the fact that earlier immigration cohorts are reaching retirement ages.

The projected changes in size of the working-age population from 2010 to 2030 are almost entirely due to the aging of persons already born and living in the United States. Assumptions about future mortality and emigration rates create a bit of uncertainty in the projections but not much. If the American economy grows and requires more workers both to replace those who retire and to create new firms and industries, the primary source of labor will be first and second generation immigrants. This basic fact will hold at all levels, from low-skilled service jobs to professionals with postgraduate degrees. It bears repeating that the reason the third-plus generation cannot be a source of workforce growth is that so many of the older members from this population segment will be aging past 65. Many young people who are third-plus generation Americans will be joining the working-age population, but they will simply be outnumbered by the flood of departing Baby Boomers. These Baby Boom departures are expected to create employment opportunities that will benefit all ethnoracial groups. For instance, Richard Alba (2009) has argued that, similar to the World War II period, this coming period could create ideal conditions for reducing competitive frictions between groups and reducing inequality among minority groups and immigrants.

In addition to its impacts on employment and future economic growth, the volume and age composition of the immigrant population also has implications for public expenditures on education, old-age security, and health care. The working ages are also the primary ages of family formation. Foreign-born women will bear an increasing share of future births in the United States. However, as discussed above, all groups in the United States appear to be converging to replacement-level fertility (two children per woman) or below by the second generation. Currently, first and second generation immigrants comprise about one of four children in schools. Their schooling generates expenditures, but it is also an investment in their future productivity and the well-being of the rapidly growing elderly population of Baby Boomers (Myers, 2007).

The post-1965 immigrants also are beginning to retire and to become eligible for Social Security and Medicare. There is also some evidence that late-age immigration has been increasing somewhat (Batalova, 2012; Carr and Tienda, 2013; Terrazas, 2009). Carr and Tienda (2013) used administrative data to examine changes in the age composition of immigrant inflows since 1980; they found that approximately two-thirds of all LPRs admitted between 1981 and 2009 were in their prime working ages. Concurrently, immigration of persons above age 65 increased, rising from about 11 percent of new LPRs admitted between 1981 and 1985 to nearly 17 percent of new admissions between 2006 and 2009. This increase is consistent with claims by Jasso and Rosenzweig (1989), who attribute this rise in older-age immigration primarily to sponsorship of parents by naturalized immigrants and to a lesser extent to the visa backlog for numerically capped relatives of naturalized immigrants. Other studies have found that numerically capped relatives from the top four sending nations contributed to late-age immigration because their family members aged while waiting in long queues for their visa priority number to be called (Tienda, 2015; Wasem, 2012).

#### 2.8 FROM TRADITIONAL GATEWAYS TO NEW DESTINATIONS: THE CHANGING GEOGRAPHY OF IMMIGRANT SETTLEMENT

The geographical distribution of immigrants across the United States has been a function of initial patterns of settlement and subsequent patterns of internal migration. The initial pattern of settlement is sometimes affected by proximity, favoring seaports of first arrival and places near border crossings. The concentration of 19th century Irish immigrants in Boston and New York and of Cubans in south Florida in the 1960s and 1970s is illustrative of the importance of proximity. Locations of economic opportunity and of established co-ethnic communities are also important determinants of settlement patterns. In the early 20th century, high labor

#### THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

demand drew immigrants to work in steel mills in Pittsburgh and Buffalo and to coal fields in Pennsylvania, as do present-day meat packing plants in small towns in North Carolina and the Midwest. Even more important than arrival proximity is the presence of families and friends who can provide temporary housing, assistance in finding jobs, and the warmth of welcome based on ties of kinship and mutual obligation. These same factors affect the secondary, internal migration of immigrants after arrival. In the 1960s and 1970s, the federal government sought to settle Cuban and Vietnamese refugees in isolated small towns throughout the country in a misguided effort to spur assimilation (Portes and Bach, 1985). Most of these families eventually moved to cities that had concentrations of their ethnicity, where they found family and relatives who could provide economic opportunity and also understand their cultural and spiritual needs.

The descendants of immigrants have less connection to the churches, institutions, and neighborhoods favored by their immigrant forebears, and they tend to move to suburban locations with more amenities and to other states and localities that offer attractive economic opportunities. Many cities and locations within cities retain an ethnic character across generations, but it usually takes a continuous flow of immigrants to maintain the social and economic vitality of an ethnic community. The deconcentration and dispersal of immigrant communities, as with the general process of assimilation, is a multigenerational process that occurs unless discrimination or other institutional factors obstruct economic and social mobility.

The initial settlement patterns of the post-1965 immigration wave follow the logic of earlier immigration flows, except that the origins of the immigrants shifted from Europe to Latin America and Asia. Most new arrivals during the 1970s and early 1980s settled in five gateway states:4 New York along the eastern seaboard; California and Texas along the southern border; Illinois in the heartland; and Florida in the southeast (Hirschman and Massey, 2008; Tienda, 2002). Immigrants registered a visible presence in another five states-Maryland, Massachusetts, New Jersey, Virginia, and Washington-which, together with the traditional destination states, housed over 80 percent of the foreign-born population until 1990 (Massey and Capoferro, 2008). With the exception of Texas and California, where proximity to the Mexican border facilitated recruitment of temporary workers into agricultural jobs throughout the 20th century, most of the initial post-1965 immigrants were concentrated in large urban centers (Singer, 2004).

<sup>&</sup>lt;sup>4</sup>This discussion follows Massey and Capoferro's (2008) classification of states. New Jersey could certainly be considered among the major immigration destination states since in recent decades it at least matches Illinois in terms of the share of new settlers, number of foreignborn, and share of foreign-born.

Beginning in the late 1980s and with greater momentum in the 1990s and 2000s, the foreign-born population witnessed a significant geographic dispersal. Labor demand was the primary factor driving the geographic scattering of the foreign-born population, particularly in industries that demanded unskilled and/or seasonal labor (Goodwin-White, 2012; Kandel and Parrado, 2005). Buoyed by low unionization rates suppressed by state right-to-work laws (U.S. Bureau of Labor Statistics, 2015a, Table 5), Southern states with histories of limited prior immigration and recent robust growth in labor demand were major beneficiaries of the dispersal toward nontraditional destinations. In addition, housing costs, school quality, public safety, and other amenities also attracted newcomers away from the traditional gateways and toward other destinations (Lichter and Johnson, 2009; Singer, 2004, 2009; Tienda and Fuentes, 2014). Among factors that pushed both settled immigrants and new arrivals away from the traditional gateways, Massey and Capoferra (2008) identified high unemployment rates, which coincided with growth in the availability of newly legalized workers, along with rising anti-immigrant sentiment and tighter border controls authorized by IRCA and selectively implemented at ports of entry along the U.S.-Mexico border.

Despite widespread agreement in the research literature that the effects of immigration are strongest in areas where immigrants are spatially concentrated, relatively few empirical studies have examined the initial settlement patterns and subsequent internal migration of immigrants. Available empirical studies suggest that internal migration rates are higher for immigrants than for the native-born. However, internal migration rates vary according to skill levels, regional origins, and legal status (Massey, 1987). Based on pubic use microdata from the U.S. Census Bureau, Bartel (1989) found large regional-origin differences in remigration following initial settlement, with Asians more likely than either Europeans or Latin Americans to engage in subsequent internal migration. Furthermore, internal migration tends to accentuate the spatial concentration of the foreign-born population, albeit differentially according to immigrants' regional origins (Bartel, 1989; Edmonston, 2002). Both the propensity to migrate and spatial concentration patterns depend both on immigrants' and their families' characteristics and on their expectations regarding conditions in potential areas of settlement.

To illustrate the changing patterns of settlement of the post-1965 wave of immigrants, Table 2-6 shows the population of immigrants who arrived in the United States during six periods—1975-1980, 1985-1990, 1995-2000, 2002-2008, 2008-2010, and 2010-2104—by current state of residence in 1980, 1990, 2000, 2008, 2010, and 2014, respectively. The first three columns, for the pre-2000 periods, are taken from Massey and Capoferro's (2008) classic analysis, based on "residence 5 years earlier" data from the 1980, 1990, and 2000 Decennial Censuses. The next three (post-2000)

The Economic and Fiscal Consequences of Immigration ase 1:18-cv-00068 Document 611-1 Filed on 11/04/22 in TXSD Page 649 of 70

	Percentage Dis	tribution of Immigr	ants Arriving in the	Percentage Distribution of Immigrants Arriving in the U.S. (Census or CPS year shown in parentheses)	year shown in par	entheses)
				Pre-Recession	Recession	Post-Recession
Group and State of Residence	1975-1980 (1980)	1985-1990 (1990)	1995-2000 (2000)	2002-2008 (2008)	2008-2010 (2010)	2010-2014 (2014)
Big Five						
Subtotal	63.8	67.3	54.7	47.8	50.7	44.0
California	31.1	35.4	21.1	17.0	19.9	12.3
New York	12.9	13.5	6.6	7.5	7.9	8.4
Texas	8.5	8.9	10.2	10.2	8.9	9.3
Florida	5.8	7.2	8.2	9.2	9.5	8.6
Illinois	5.5	4.5	5.3	4.0	4.5	4.2
Second Tier						
Subtotal	12.1	13.2	14.1	14.9	12.6	15.9
New Jersey	3.7	4.3	4.7	4.6	3.7	4.8
Virginia	1.9	2.3	2.5	3.0	2.2	3.1
Maryland	1.8	2.2	1.9	2.5	2.6	2.8
Massachusetts	2.6	2.8	2.6	2.8	2.2	2.8
Washington	2.1	1.6	2.4	2.0	1.9	2.4
Third Tier						
Subtotal	18.5	15.6	25.5	24.7	22.6	23.9
Georgia	0.7	1.2	3.0	3.1	3.0	2.3
Pennsylvania	1.8	1.9	1.7	1.4	1.9	2.9
Michigan	1.9	1.3	2.0	1.7	1.2	2.9
Arizona	1.1	1.5	2.0	2.6	1.9	1.1
	0	0		1	(	7

1,287

1,267

1,196 80

16.1 100.0

7	5

ecticut 1.4 ecticut 1.0 esota 0.5 ado 1.3 essee 0.4 da 1.3 nn 1.0 nn 1.0 nn 1.0 nn 1.0 nnsin 0.4 na 0.6 iii 1.4 nnsin 0.8 iii 0.7 ites 0.6 ttes 0.7 ttes 5.6 ttes 100.0 Annual Number 5.6 ttes 5.6 Though Annual Number 77 Diversity Index 70  The Eurrent Population Survey. The Eurrent Population Survey.	1.5	1.2	1.2	1.8	6.0	1.1	1.2	6.0	1.0	9.0	0.8	9.0	8.0	0.4	0.3	5.7	100.0	1,146	77	erro (2008, Table 1
Ohio  Connecticut  Minnesota  Colorado  Tennessee  O.4  Nevada  Oregon  Utah  Indiana  Wisconsin  Wisconsin  Wisconsin  Cotes  Missouri  Louisiana  Rhode Island  Other States  Total  Average Annual Number  of Immigrants Arriving  (thousands)  Theil's Diversity Index  OUT  Connecticut  Theil's Diversity Index  Colling CE: Dava from Flood et al. (2015) and Survey.	1.0	1.2	9.0	0.8	0.3	0.5	6.0	0.4	0.3	6.0	9.0	0.5	0.4	0.4	0.5	3.9	100.0	296	99	Massev and Canofe
Ohio Connecticut Minnesota Colorado Tennessee Nevada Oregon Utah Indiana Hawaii Wisconsin Kansas Missouri Louisiana Rhode Island Other States Total Average Annual Number of Immigrants Arriving (thousands) Theil's Diversity Index NOTE: CPS = Current Popu	1.4	1.0	0.5	1.3	0.4	0.5	1.0	0.4	9.0	1.4	8.0	9.0	0.7	1.1	0.5	5.6	100.0	274	70	lation Survey.
	Ohio	Connecticut	Minnesota	Colorado	Tennessee	Nevada	Oregon	Utah	Indiana	Hawaii	Wisconsin	Kansas	Missouri	Louisiana	Rhode Island	Other States	Total	Average Annual Number of Immigrants Arriving (thousands)	Theil's Diversity Index	NOTE: CPS = Current Popul SOURCE: Data from Flood

640

periods are selected to show the settlement patterns during the pre-recession period of 2002-2008, the years of the Great Recession (2008-2010), and the post-recession period (2010-2014). The data for these periods are based on a survey question about the year of arrival in the United States, which is included in both Decennial Censuses and the Annual Social and Economic Supplement (March round) of the CPS. The dates of arrival include the first few months of the year of interview (April for a Decennial Census and March for the CPS). The absolute number of immigrants in each data source is adjusted to annual averages (total arrivals/years since arrival).

The classic pattern of post-1965 immigrant concentration on the West Coast, East Coast, and a few other locations is evident in the column for 1980, which reflects the character of immigration in the late 1970s. During this period, 31 percent of recent immigrants were in California and 44 percent were in just two states: California and New York. There were also significant numbers of new immigrants in a few other states: Florida, Illinois, and Texas. More than 60 percent of all recent immigrants resided in these top five destination states. A closer look reveals that most of these immigrants resided in the major cities in these states: Chicago, Houston, Los Angeles, Miami, New York City, San Francisco, and a handful of other metropolitan areas. A second tier of states, including Maryland, Massachusetts, New Jersey, Virginia, and Washington, collectively housed 12 to 13 percent of immigrants, or about 2 to 3 percent each. Another 20 states, identified as "third tier" in Table 2-6, each had about 1 percent (more or less) of all recent immigrants each, for a total of 18 percent. Although the post-1965 wave of immigration was in full swing in the late 1970s—on average, more than a quarter million immigrants arrived annually during this period—the very concentrated patterns of settlement meant that the majority of the American population, especially in medium-size cities and small towns in the Midwest and South, had little contact with new immigrants.

The pace of immigration accelerated in the late 1980s with more than 760,000 arrivals annually, almost tripling the average from 10 years earlier. The patterns of immigrant settlement were even more concentrated in 1990 than in 1980, as confirmed by the decrease in Theil's Diversity Index from 70 to 66.6 There was an increasing concentration of recent immigrant settle-

$$E = \frac{-\sum_{i=1}^{n} p_i * \ln(p_i)}{\ln(n)} \times 100$$

where  $p_i$  is the proportion of immigrant arrivals in state i and there is a total of n states. The index varies from 0 (all immigrants in one state) to 100 (an equal number of immigrants in each state).

<sup>&</sup>lt;sup>5</sup>As noted above, New Jersey could reasonably be categorized in the first group, which would become the "big six."

<sup>&</sup>lt;sup>6</sup>Geographical diversity of immigrants is measured with Theil's (1972) entropy index,

ment in California, New York, and Florida, and some second tier states witnessed increased settlement of recent arrivals. Although many national political leaders thought the concentration of immigrants was a sign of slow assimilation, immigration researchers explained that the gravitation of immigrants to locations with dense social and business networks was not only the historical pattern but also the path most likely to lead to upward mobility (Portes and Rumbaut, 1990).

The 1990s were a period of rapid economic growth and also increased immigration; the average annual number of arrivals in the late 1990s rose to more than 1 million per year. It was also the beginning of a dispersed immigrant settlement pattern that generated many new immigrant destinations (Massey, 2008; Singer, 2004, 2009; Tienda and Fuentes, 2014; Waters and Jimenez, 2005). Although the vast majority of the foreign-born population continued to reside in large metropolitan centers (with more than half of the foreign-born population concentrated in just 10 metropolitan areas), immigrants' spatial redistribution was particularly vigorous in states where few had previously settled, including small towns, suburban communities, and cities in Georgia, North Carolina, and several Midwestern states (Hirschman and Massey, 2008; Lichter and Johnson, 2009; Singer, 2009). As shown in Table 2-6, the Diversity Index rose from 66 to 77, indicating a very strong trend away from concentrated settlement.

Although gateway cities and states continued to receive the largest numbers of new immigrants, there were very large relative shifts of new immigrants away from California and New York. The diversion of immigrants away from California in the 1990s and continuing to recent years has been stunning. California's share of the immigrant inflow plunged from 35.4 percent of the nation's new arrivals in the latter half of the 1980s to 17.0 percent in the early 2000s (Table 2-6). The inflow corresponding to this 18 percentage point decline was distributed across many new places, each with a relatively small share of the total shift. The largest gains in foreign-born population share were 1.8 percentage points in Georgia and North Carolina. The shift has been explained by loss of job opportunities in California in the 1990s due to that state's unusually deep and prolonged recession, combined with high housing prices as an added deterrent (Myers, 2007, Ch. 5). Once migration networks discovered the plentiful jobs and low costs across the South, much of the immigrant inflow was diverted away from California, save for selected high-skilled Asian immigrants and family reunification sponsored by California's established base of more than 8 million foreign-born residents. The demographic renewal of depopulated nonmetropolitan areas brought by new immigrants has visibly altered the ethnic composition of rural America in a short period of time and has also infused new economic life into dwindling communities (Lichter and Johnson, 2009; Tienda and Fuentes, 2014). The geography of immigration

defies simple generalizations due to the enormous diversity of places and people involved.

The post-2000 patterns are even more complex, largely because of the Great Recession of 2008 to 2009, which interrupted the dispersal to new destinations. In Table 2-6, the panel examines three periods-2002 to 2008, 2008 to 2010, and 2010 to 2014—that provide pre-recession, recession, and post-recession comparisons. The first period, from 2002 to 2008, shows a continuation of immigrant flows to new destinations and away from California, New York, and Illinois. Relative growth of immigrant settlement accelerated in the Virginia and Maryland suburbs of Washington, DC, but increased most significantly in the residual grouping of "other states," which doubled their immigrant shares from 6.1 percent in the late 1990s to 12.6 percent in the pre-recession period. The panel's interpretation is that the attractions of economic opportunity in new destinations, plus the emergence of new immigrant communities, are eroding the pull of the traditional gateway states and cities.

The Great Recession did not stop overall immigration. The CPS data in Table 2-6 show that more than 1 million new international migrants arrived annually in the years before, during, and after the recession. Since these data count only new arrivals and not departures, they are not necessarily in conflict with the evidence that net undocumented migration into the United States slowed or even reversed during these years. The reported inflows might have been counterbalanced by outflows. Moreover, new arrivals after the recession have been mainly authorized immigrants, most of whom are on family reunification immigrant visas or were admitted on temporary work or student visas.

During the Great Recession period (2008-2010), the pull to new destinations waned and there was a slight reversion back to traditional gateways. The diversity index that had risen from 66 to 80 from the late 1980s to the early 2000s (indicating more geographic dispersion) fell slightly to 78 during the recession years. California increased its share of immigrants, as did a couple of other traditional gateway states. Many of the second- and third-tier states that had been gaining immigrants in the 1990s and early 2000s saw a decline in their share of new immigrant arrivals. One explanation, which the panel considers likely, is that many of the growth sectors that were pulling migrants to nontraditional locations, such as construction and manufacturing, had few jobs during the recession for anyone, including immigrants. In the traditional gateways, the ethnic economy, immigrant institutions, and family networks were better situated to buffer the adverse effects of the recession. The new destinations were also in states with the highest concentration of undocumented persons among their immigrant populations (Passel and Cohn, 2014). Thus, the slowdown in unauthorized immigration probably also slowed settlement in many new destinations.

The most recent period, based on 2014 CPS data, shows a return to the dispersal of new migrants away from traditional gateway areas (especially California) and gains for the second tier states and other states. In short, the Great Recession interrupted, but did not reverse, the post-1990s trend toward increasing geographic dispersal of the foreign-born population. Economic recovery rekindled the trend away from traditional gateway locations to new destinations.

The classification of states into "traditional gateways" and "new destinations" obscures more complex patterns that are evident for individual states over the entire 35-year period. Perhaps the most dramatic change is the declining primacy of California as the leading destination for new immigrants. Although California is still the leading destination, receiving 12 percent of new immigrants from 2010 to 2014, this figure is about onethird its foreign-born share in the 1970s and 1980s. Florida, by contrast, increased its share of new immigrants from 6 to almost 11 percent as other groups beyond Cubans (Latin American and Caribbean) have settled there. The increasing dispersal of immigrants around the county has made many more Americans aware that immigration is a national phenomenon.

#### 2.9 CONCLUSIONS

This brief survey of historical, current, and future immigration trends supports five specific conclusions drawn by the panel:

- In terms of the proportion of new immigrants to the national population, contemporary immigration to the United States is at moderate levels historically. Although contemporary net immigration rates are not high by historical standards, international migration is a larger component of U.S. population growth now than in the past because the share of growth due to fertility of the native-born has fallen appreciably.
- Immigration has broadened the ethnic diversity of the American population and will continue to do so, but the increasing integration of American society may make ethnic distinctions ever less meaningful.<sup>7</sup> There has been a steady blurring of origin group categories over the last 100 years or more of our history, and with rising rates of intermarriage there is little reason to assume this trend will change in the future. A great source of American resilience as an immigrant-absorbing country is that assimilation has been a two-way street, with the mainstream society gaining exposure to

<sup>&</sup>lt;sup>7</sup>The sister report to this one (National Academies of Sciences, Engineering, and Medicine, 2015) fully explores topics pertaining to the integration of immigrants into American society.

2015).

- cultures and customs of many nations, as well as benefiting from immigrants' high aspirations, strong families, and strong work ethic (National Academies of Sciences, Engineering, and Medicine,
- 3. From 1970 to 2010, the American labor force has accommodated the growth of 80 million persons in the prime working ages (25-64), even while the ratio of female employment to the total population grew by 50 percent from 1970 to 2000. The rapid intergenerational growth of successive cohorts of the third-plus generation—that is, larger cohorts of persons ages 25-34 entering the working years and replacing cohorts who were leaving the prime working age years—ceased after 2010 and will turn negative from 2020 to 2030. Future labor force growth will therefore depend completely on immigrants and their U.S.-born descendants.
- 4. Immigration helps to slow the aging of American society. The senior ratio—the number of people age 65 and older divided by the number ages 25 to 64—has begun to rise sharply, which places added weight on the smaller working-age group to support Social Security, Medicare, and other old-age programs. After decades of stability hovering between 20 and 24 seniors per 100 working-age adults, the ratio is projected to climb to 44 by 2040 (and to 48 by 2065). It would climb to 49 by 2040 (and to 56 by 2065) if no new immigrants (and their descendants) are included in projections of the population after 2015. Given continued levels of immigration in population projections, the increase in the senior ratio in the next 25 years is 28 percent less than if no immigration were projected in the population; for projections out to the next 50 years, the increase in the ratio is 40 percent less if current levels of immigration continue.
- 5. The shift of immigrant settlement away from traditional gateway areas to new destinations, which began in the 1990s, was interrupted during the Great Recession of 2008-2009 but has resumed in the period since. This dispersal of immigration settlement, combined with the virtual cessation in the net inflow of undocumented immigrants, has changed the character and direction of the post-1965 wave of immigration.

The subsequent chapters of this report address economic issues of contemporary immigration with a focus on the labor market and fiscal system. Many of the controversies over these questions turn on issues of the availability of data and the precise measurement of key theoretical concepts. There is also debate over the interpretation of relatively small differences as well as the assessment of short-term versus long-term impacts, some of

which still lay in the future. The study of past demographic trends does not resolve these empirical issues or contemporary policy debates, but it does offer a valuable perspective on American society's resilience in absorbing immigrants.

For example, the initial political and social response to major waves of immigration has historically almost invariably been negative. Many Americans in the early 21st century, just like their predecessors in the mid-19th and early 20th centuries, fear that the numbers and characteristics of new immigrants will have adverse economic, demographic, and cultural impacts on the welfare of the native-born population. Although there may well be short-term costs of immigration, both for immigrants and the host society, study of the last two centuries suggests the long-term impact has been almost entirely positive. Not only did markets adjust but U.S. society and culture have created institutions that allowed the descendants of immigrants to move up the socioeconomic ladder and that broadened the definition of identity as an American far beyond the imagination of the late 18th century founding population.

### 2.10 TECHNICAL ANNEX ON COUNTING IMMIGRANTS

To understand the impacts of immigration on U.S. society and its economy, it is necessary to know how many immigrants have arrived on U.S. shores, when they arrived, and from where. Largely because of data limitations, authoritative answers to these seemingly basic questions are surprisingly difficult to obtain. In theory, immigration is measured as stocks—namely, counts of the resident foreign-born in censuses and surveys—and flows, which are the numbers of arrivals (minus departures) in a given period. Even with complete and accurate measurement, however, the stocks of the foreign-born are not simply the sum of the net flows of prior immigrants. Rather, in any given year, the foreign-born stock represents the survivors among prior migrants, those who neither emigrated nor died. International migration adds not only to the foreign-born stock but also to the numbers of native-born Americans through the fertility of the immigrants after they arrive. The U.S.-born children of immigrants—commonly referred to as the "second generation"—are native born, both literally and in law. Yet because of their proximate migration background, many organizations and service agencies consider the second generation (especially when they are children living in their parents' households) as part of the immigrant community. An ambiguity is that children may have one foreignborn and one native-born parent. By general convention, if either parent is foreign-born, the children are considered second generation.

Stock measures of the foreign-born population are affected by changes in both census enumeration methods and items in the questionnaire that

identify immigrants. Every Decennial Census from 1850 to 2000 included a question on birthplace (and a question on country of birth for the foreignborn). Comparable data on the foreign-born are available from the ACS, which replaced the long-form census schedule after 2000, and from the CPS, which is used to track labor market trends. Decennial Census, CPS, and ACS data on the foreign-born population include permanent residents, persons on temporary work and student visas, and undocumented residents who either entered without inspection or have overstayed visas.8 The native-born population includes persons born in the 50 states and the U.S. territories (e.g., Puerto Rico, American Samoa, etc.) and those born aboard with U.S. citizen parent(s). Therefore, the official census definition of foreign-born-all residents who are not U.S. citizens at birth-differs somewhat from the common understanding that the foreign-born are persons born outside the 50 states.9

The major limitation of Decennial Census, ACS, and CPS data for the study of immigration is that the current visa status (and visa status at time of arrival) of foreign-born respondents is not recorded. Current citizenship and year of arrival are measured in most data sources, although with some significant variations in the wording of the question and in measurement precision in the arrival dates. In census-type surveys, therefore, it is impossible to distinguish between LPRs ("green card" holders), persons on temporary nonimmigrant visas for work or study, and persons who lack an official visa. Nonetheless, it is common statistical practice to refer to the foreign-born population counted in a census or estimated by a survey as "immigrants," even though the category includes foreign students, temporary workers on H-1B and other visas, and migrants who entered the country surreptitiously or overstayed legal visas. There is considerable mobility across these statuses, and current visa status does not always predict who stays permanently.

Changes in the stock of immigrants over time (e.g., between rounds of a census or survey) are very imperfect measures of immigration flows. Net changes in the immigrant stock are a result not only of in-migration but also of out-migration and deaths of immigrants that have occurred between rounds of the census or survey. Although measurement can be improved by

<sup>&</sup>lt;sup>8</sup>Although the Decennial Census and federal surveys attempt to be universal, nonresponse is a serious problem. Undocumented persons are likely to be underenumerated in all surveys

<sup>&</sup>lt;sup>9</sup>This number of people born abroad of American parents has increased significantly since World War II. Prior to the 1980 Decennial Census, this group was identifiable in census data through the questions on country of birth of parents. Since 1980, the Decennial Census (and the ACS and CPS) inquire about citizenship as well as country of birth. This permits data users to identify the foreign-born population as well as to distinguish U.S. citizens by birth who are "born abroad of American parent(s)."

considering shorter intervals and recent arrivals (based on year of arrival data), the growth (or decline) of the size and change in the composition of the foreign-born population are only indirect measures of the flows of immigration.

Flows of immigrants are also difficult to measure because of changes in the criteria used to record new admissions and because return flows are poorly measured. In 1820, the federal government began counting immigrants based on arrivals by ships at major seaports. However, persons crossing land borders were not counted until the early years of the 20th century. The historical fact that a considerable number of immigrants entered the United States by crossing land borders after arriving by ship at Canadian ports renders counts of immigrants for these periods incomplete.

A second major problem with flow estimates is the lack of comprehensive data on departures, or emigration. Because of poor data quality, the U.S. Immigration and Naturalization Service ceased publishing emigration counts in 1958. Historians have estimated that perhaps up to one-third of the persons who arrived between 1880 and 1924 returned to Europe (Wyman, 1993, p. 10). Even higher figures were reported in a recent study based on detailed administrative records from Ellis Island (Bandiera et al., 2013). That study found that out-migration rates may have been as high as 60 to 70 percent during the early 20th century, although they varied sharply by group, being quite low for those who faced persecution at home but comparatively high for groups dominated by labor migrants. Recent research suggests that current emigration levels are not insignificant and also vary sharply by group (Ahmed and Robinson, 1994; U.S. Census Bureau, 2014; Van Hook et al., 2006).

Another problem with official flow data is the change in definition from "arrivals" to "lawful permanent residents" (LPRs) in the 1930s. When the United States first implemented restrictions on entry by health status and other criteria (literacy was added in 1917), alien arrivals were "inspected" by authorities before being allowed to enter the United States. Steamship companies also screened potential immigrants at embarkation because they were liable for the return transportation of persons denied entry to the United States. After the passage of the 1924 legislation, prospective immigrants were required to obtain an immigrant visa from an American consular office in their origin country (Zolberg, 2006, Ch. 8). The shift in measurement to those with immigrant visas probably had little impact during the 1930s and 1940s. Not only were immigrant flows fairly modest but the numbers of nonimmigrant foreigners who were in the United States for tourism, study, or temporary work also was much smaller than the inflow of permanent immigrants. This is no longer the case. Currently, a majority of the "new" immigrants getting green cards in most years have already been in the United States (often for many years) on temporary visas.

### THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

Based on DHS administrative records, there were 61 million nonimmigrant border crossings in 2013 (Foreman and Monger, 2014).<sup>10</sup> Of these, more than 48 million were tourists; however, there were also about 3 million arrivals (and associated family members) on temporary work visas, 1.7 million students (and family members) on F1 and M1 visas, a half-million exchange visitors on J1 and J2 visas, and more than 6 million temporary visitors for business on B1 and WB visas. Very few of these nonimmigrant entrants become residents of the United States, as the vast majority are only in the country for short periods.

There is no official count of persons who are in the United States without a visa—the undocumented population—but the expert consensus is that the undocumented population peaked at approximately 12 million in 2007, then fell to about 11 million in the wake of the Great Recession (Baker and Rytina, 2013; Passel et al., 2013).

Both side-door (nonimmigrant visa entrants) and back-door (undocumented entrants) arrivals have complicated the assumption that the number of persons receiving LPR status reliably tracks new arrivals to the United States. Simply put, there are many more persons entering (and leaving) on temporary visas (or without a current visa) than the number of new LPRs. Most but not all persons on temporary work and student visas are counted as part of the foreign-born population in censuses and surveys, which inflates immigrant stock measures. However, people on temporary visas who are included in the count of the foreign-born population very likely represent less than 5 percent of the foreign-born population (National Academies of Sciences, Engineering, and Medicine, 2015, p. 119). Temporary visa holders can achieve LPR status via sponsorship by an employer or family member. In recent years, large pluralities of new LPRs are persons who adjust their temporary visa status to LPR after many years of residence with or without a visa (Kandel, 2014; U.S. Department of Homeland Security, 2013). Notwithstanding these difficulties in measuring immigration flows and statuses, about 70 percent of the foreign-born population in census and survey data are LPRs or naturalized U.S. citizens; the remainder consists largely of undocumented immigrants (Pew Research Center, 2015a, Ch. 5).

<sup>&</sup>lt;sup>10</sup>Technically, this is the number of I-94 admissions. The estimated number of nonimmigrant border crossings is even larger (173 million): The official estimate includes persons with border crossing cards and other frequent travelers for whom electronic I-94 forms are not automatically generated. The conversion from paper to electronic I-94 forms has increased the reported number of nonimmigrant admissions (Foreman and Monger, 2014).

# Socioeconomic Outcomes of Immigrants

#### 3.1 INTRODUCTION

The skill mix of the immigrant population—and, particularly, how their education and experience levels compare to those of the native-born—is a key determinant of the impact their arrival will have on the wages and employment in receiving labor markets. These characteristics also affect immigrant assimilation and immigrants' fiscal impact. If an inflow of immigrants is composed mainly of low-skilled workers, it is reasonable to expect that the pre-existing low-skilled population (both native-born and earlier immigrant arrivals) will be most affected by the increased supply of workers. Likewise, if an immigrant inflow is composed of high-skilled workers in very specialized fields, pre-existing workers in those narrow fields are most likely to be affected.1 Furthermore, the skill mix of the immigrant population is likely to influence the speed with which immigrants assimilate in their new country. Skilled immigrants may acquire new skills more quickly, including English language fluency, and may have more ready access to job information that would allow them to catch up with natives relatively quickly.

Labor market skills are also directly linked to fiscal impacts. As with the native-born, low-skilled immigrants contribute less on average than their higher skilled counterparts to the public coffers in the form of income taxes and other kinds of taxes. Based on their lower incomes, on average,

<sup>&</sup>lt;sup>1</sup>In-depth theoretical and empirical support for these assertions comprise the content of Chapters 4 and 5.

they have greater eligibility for some programs. However, their immigrant status, even if legal, may make them ineligible for other programs.

Immigration confers economic benefits on the native-born population as a whole but, among the native-born, there are likely to be winners and losers. While pre-existing workers most similar to immigrants may experience lower wages or a lower employment rate, pre-existing workers who are complementary to immigrants are likely to benefit, as are nativeborn owners of capital. Beneficial effects of skilled immigration are likely to be reinforced in the presence of capital-skill complementarity, where native-owned capital becomes more productive when combined with highskilled labor; the panel delves into these consequences of immigration in Chapters 4 and 5. These benefits may be further augmented if there are "productivity spillovers" between high-skilled immigrants and the nativeborn workforce.

This chapter summarizes trends in the skill mix of the immigrant population and addresses how these trends compare with those of natives. Educational attainment is examined, as are differences in the occupations of immigrants and the native-born. The chapter also examines the extent of economic assimilation: the rate at which the economic outcomes of immigrants catch up with those of native-born Americans, focusing on employment, wage, and English-language acquisition outcomes. It also reviews some of the differences between immigrants and the native-born in terms of poverty rates and participation in social assistance programs. The descriptive statistics presented here serve to link the discussion of context and history in Chapter 2 and the analyses of wage, employment, and fiscal impacts in later chapters.

#### 3.2 EDUCATION AND OCCUPATION PROFILES

#### **Education Profiles**

Trends in the skills of immigrants relative to those of the native-born help answer questions such as whether today's immigrants face greater or lesser barriers to full economic assimilation than in the past and whether they are likely to displace or complement native-born workers in certain segments of the labor market if they arrive in sufficiently large numbers. In this section, the panel examines changes in the distribution of educational attainment of immigrants over successive cohorts, relative to the corresponding native-born cohorts.

The education of a cohort of immigrants at a given point in time can be divided into two components: (1) the initial level of education they attained prior to their arrival in the United States, and (2) additional education attained after immigrating. Higher amounts of both are expected to lead to

more favorable earnings outcomes and fiscal impacts. Using data from the 1970-2000 Decennial Census and the 2012 3-year American Community Survey (ACS),<sup>2</sup> which covers the years 2010-2012, the panel documents how immigrants' initial education upon arrival has changed over the past few decades. We define "recent immigrants" as persons who were born outside the United States (excluding those born to U.S.-citizen parents) who arrived within the 5 years prior to each census or to the 2012 ACS. The analysis is restricted to individuals ages 25 and older. Figure 3-1 shows that the education levels of immigrant cohorts upon arrival have been rising steadily over time. For example, about half of recent immigrants in 1970 had less than a high school education, but by 2012 this figure had halved to 26 percent. Whereas in 1970 only 20 percent of recent immigrants had completed postsecondary education (8% with college education and 12% with advanced education), by 2012 this proportion had increased to 38 percent (22% with college education and 16% with advanced education). Average years of school completed are superimposed on the same chart to reveal the steady upward trend, from 10.2 in 1970 to 12.6 in 2012.<sup>3</sup>

Section 3.6 of this chapter is a Technical Annex of the panel's detailed tabulations and regression analyses based on Decennial Census and survey data in the Integrated Public Use Microdata Series (IPUMS). Tables 3-16 and 3-17 in Section 3.6 break out the educational attainment levels at arrival for men and for women, respectively. These tabulations show that increases since 1970 in immigrant education levels at arrival have been large for both men and women.

The rise in immigrants' initial education over successive immigrant cohorts should be interpreted within a broader U.S. context, in which improvement in educational attainment has been a general phenomenon

 $<sup>^2</sup>$ The ACS data were accessed through IPUMS (Ruggles et al., 2015), with all estimates weighted to be nationally representative. In tables and text throughout Chapter 3, 2012 is used as shorthand for 2010-2012.

<sup>&</sup>lt;sup>3</sup>The continuous measure of educational attainment is calculated by first assigning each person the number of years of completed education above kindergarten as reported in the detailed educational attainment variable *educ* in the ACS data provided by IPUMS. For categories of years of education, such as "Grades 1, 2, 3, or 4," the midpoint is used (in this case, 2.5 years). For educational attainment reported by category, such as "associate's degree," or "bachelor's degree," we followed Jaeger (1997) in assigning years of educational attainment. However, for those reporting a doctoral degree, we assigned additional years of educational attainment (beyond that used by Jaeger) on the basis of data on the average time to completion of doctoral degrees in the United States from the National Science Foundation (see http://www.nsf.gov/statistics/infbrief/nsf06312/). In results not presented here, we used a different coding scheme for calculating continuous years of educational attainment, relying on the IPUMS *educ* variable, which presents broader educational attainment categories that are consistent across years. The average years of education resulting from this alternate coding scheme were very similar to those resulting from our original coding scheme, which is used in this report.

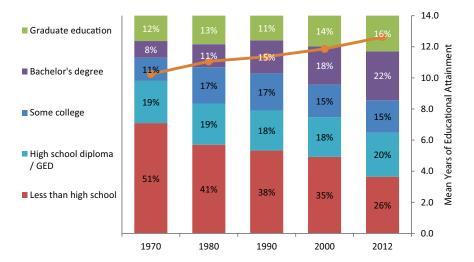


FIGURE 3-1 Educational attainment of recent immigrants (those who entered in the 5 years prior), by Decennial Census year 1970-2000, and in 2012 (in percentages).

SOURCE: Analyses of 1970-2000 Decennial Census data and 2010-2012 American Community Survey data, accessed through the Integrated Public Use Microdata Series.

over birth cohorts in the native-born population (Fischer and Hout 2006). This comparison is important because, as noted in the introduction, the impact of immigration on wages and employment of the native-born is directly related to relative education (and experience) levels. Figure 3-2 compares trends in education (measured in mean years of schooling) for recent immigrants and for native-born persons. Given that about one-half of recent immigrants in each year fall in the 25-34 age range, compared to roughly one-quarter of native-born persons, Figure 3-2 presents the data separately for three age ranges: (1) everyone ages 25 and older, (2) those ages 25-34, and (3) those ages 35 and older.

The native-born have consistently higher educational attainment. However, for adults ages 25-35 (middle panel) there has been convergence in education between the two groups, particularly since the 1980s. In 1970, recent immigrants ages 25-34 had 0.5 years less schooling than their native counterparts, with mean levels of 12.1 for the native-born and 11.6 for a recently arrived immigrant. By 1980, the gap had expanded to 1.2 years, with mean education levels of 13.1 and 11.9 respectively. By 2012, the gap had narrowed to 0.3 years, with a mean of 13.7 years of education for the native-born and 13.4 for the recently arrived foreign-born. On the other hand, for the total ages 25 and older population (left-hand panel in

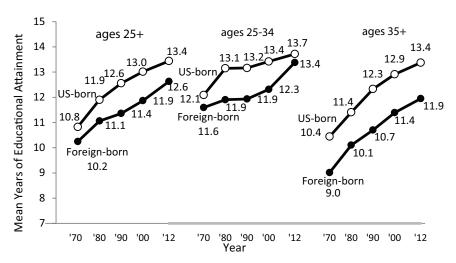


FIGURE 3-2 Mean years of educational attainment of U.S.-born and recent immigrants (those who entered in the 5 years prior), by Decennial Census year 1970-2000, and in 2012.

SOURCE: Analyses of 1970-2000 Decennial Census data and 2010-2012 American Community Survey data, accessed through the Integrated Public Use Microdata Series.

Figure 3-2), the educational gap between immigrants and natives ended up slightly larger in 2012 than in 1970 (0.8 versus 0.6 years of education) because, even as the native-born/foreign-born education gap narrowed for those ages 25-34, the gap remained steady for adults ages 35 and older, changing from 1.4 years of schooling in 1970 to a gap of 1.5 years in 2012.

To assess trends for different groups based on national or regional origins, Figure 3-3 presents mean years of schooling among recent immigrants ages 25 or older across the largest immigrant groups identifiable in the data. The trends differ sharply by country or region of origin: The largest increases in educational attainment have occurred among immigrants from Mexico, China, and the group combining immigrants from Europe, Oceania, and Canada. Average Mexican immigrant education improved by 3.8 years, from a very low level of 5.7 years in 1970, to 9.5 years in 2012. Chinese immigrants started from a relatively high education level of 10.5 years and moved up to 13.9 years—an average increase of 3.4 years of schooling. For the miscellaneous group that includes immigrants from Europe, Oceania, and Canada, education levels increased over the analysis period from an average of 10.2 years of schooling to 14.8 years, for an average increase of 4.6 years. Immigrants from Latin American countries other than Mexico experienced an average increase of 1.8 years in edu'80 '90 '00 '12

90

'70 '80 '90 '00 '12

'70 '80 '90 '00 '12

FIGURE 3-3 Mean years of educational attainment of recent immigrants (those who entered in the 5 years prior), by Decennial Census year 1970-2000, and in 2012, by country/region of birth.

Year

'70 '80 '90 '00 '12

SOURCE: Analyses of 1970-2000 Decennial Census data and 2010-2012 American Community Survey data, accessed through the Integrated Public Use Microdata Series.

cation levels from 9.5 to 11.3 years. Three origin groups—immigrants from India, Philippines, and Asia other than China—experienced a muted U-shaped profile, with very small net gains during the period. Immigrants from Africa are the only group with an opposite trend to that of all immigrants, as the average years of education of recent admission cohorts declined from 13.7 years in 1970 to 13.0 in 2012—but this group had a very high starting level.

## **Age-Education Pyramids**

This subsection describes the age-education structure of the foreignborn and native-born populations in the United States. For the native-born population, the age structure is driven primarily by past fertility behavior and secondarily, in older ages, by mortality patterns. For the immigrant population, however, the age structure is determined less by fertility and mortality than by historical arrival rates and by the age composition of new immigrant inflows.

We use population pyramids to visualize the joint age-education structure of the foreign-born population relative to the native-born population from 1970 to 2002. Figure 3-4 presents an age-education pyramid for

foreign-born residents in 1970 and 2012. Figure 3-5 displays comparable information for native-born residents. These pyramids, like typical age-sex pyramids, graphically display the age distribution of a population. However, they differ from typical age-sex pyramids in two important respects. First, the pyramids do not reflect the actual sizes of the two populations, as they only show within-population proportions (i.e., each pyramid sums to 100 percent for its specified population); population sizes are provided in notes accompanying the figures. Second, each horizontal bar representing the relative size of an age group is divided into education groups—from low (light colored) to high (dark colored). Five education groups are distinguished for the population age 15 and greater: (1) less than high school (or less than 12 years of education, depending on the source data), (2) high school (12 years of education), (3) some college (13-15 years of education), (4) college completion (or 16 years of education), and (5) beyond college (more than 16 years of education).

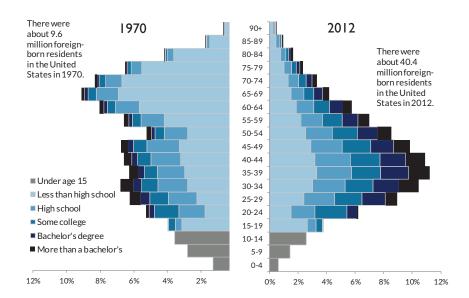


FIGURE 3-4 Age and educational attainment of foreign-born residents, 1970 and 2012.

NOTE: The 9.6 million foreign-born U.S. residents in 1970 constituted 4.7% of the total population. The 40.4 million foreign-born U.S. residents in 2012 constituted 13% of the total population.

SOURCE: Analyses of 1970 Decennial Census data and 2012-2012 American Community Survey data, accessed through the Integrated Public Use Microdata Series.

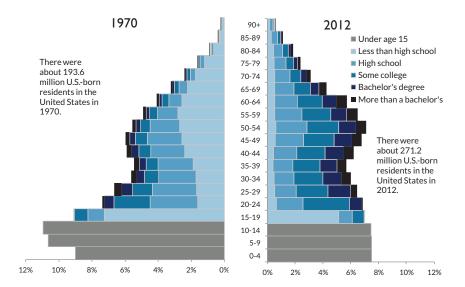


FIGURE 3-5 Age and educational attainment of U.S.-born residents, 1970 and 2012.

NOTE: The 193.6 million native-born U.S. residents in 1970 constituted 95.3% of the total population. The 271.2 million native-born U.S. residents in the United States in 2012 constituted 87% of the total population.

SOURCE: Analyses of 1970 Decennial Census data and 2012-2012 American Community Survey data, accessed through the Integrated Public Use Microdata Series.

Although the size of the native-born population increased during the observation period, the relative size of the total foreign-born population expanded much more. In 1970, the ratio of the native-born to the foreign-born population was about 20, meaning that there were 20 native-born U.S. residents for each foreign-born resident. This ratio steadily declined to 15 in 1980, 12 in 1990, 8 in 2000, and 7 in 2012.

Aside from children younger than age 15, the foreign-born population evolved from being a relatively old population in 1970 to a relatively young population in 2012. This is because most immigrants arrive in their early adult years (ages 20-35). A comparison of the two pyramids reveals that the number (and share) of immigrants ages 30-39 has swollen to offset the declining numbers of the native-born population in that age range, a decline due to the late 20th century fertility bust.

It is also noteworthy that in both 1970 and 2012 the educational attainment of the foreign-born population was more concentrated at the extremes than that of the native-born population, particularly for young

adults. In 1970, for example, 41 percent of the foreign-born population ages 30-34 had not completed high school, compared to 30 percent of the native-born. In the same age group, 11 percent of the foreign-born population had attained more than a 4-year college education in 1970, compared with 6 percent for the native-born population. By 2012, the percentage of the population ages 30-34 that completed less than high school was down to 29 percent for the foreign-born and to 8 percent for the native-born. At the high end of the education distribution, 13 percent of the foreign-born population had attained more than a 4-year college education, versus 11 percent of the native-born population. In 1970, for the 30-34 age group, 7 percent for the foreign-born population had 4-year college education (and no more) while 8 percent for the native-born population had 4-year college education (and no more). By 2012, the numbers at this achievement level had grown to just over 17 percent for the foreign-born population and almost 23 percent for the native-born population.

For the broader working age population—those ages 25-64—the relative differences in educational achievement between immigrants and natives are not dissimilar from those for the younger (ages 30-34) group. In 1970, 52 and 41 percent of the foreign-born and native-born populations, respectively, had not completed high school; by 2012, these rates had dropped to 28 and 8 percent, respectively. In this broader age group, 7 percent of the foreign-born population and 5 percent of the native-born population had attained more than a 4-year college education in 1970; these rates had climbed to just over 11 percent and just under 11 percent, respectively, by 2012. The percentage of the population in this age group with a 4-year college education (and no more) was slightly lower across the board relative to the 30-34-year-old cohorts: just over 7 percent for the foreign-born population and just over 8 percent for the native-born population in 1970; by 2012, the numbers at this achievement level had grown to just over 17 percent of the foreign-born population and just under 23 percent of the native-born population.

Three conclusions stem from comparing the education-age pyramids for natives and immigrants:

- 1. Educational attainment of recent immigrants has improved appreciably over the past few decades.
- 2. For recent immigrants ages 25-34, educational attainment has risen in comparison to that of native-born Americans. Among all age groups, however, the educational attainment gap has remained relatively constant over the period.
- 3. Compared to the native-born, recent immigrants continue to be overrepresented among the high and low categories of educational attainment.

# **Occupation Profiles**

As in most social surveys and statistical reports, U.S. Decennial Censuses and the ACS collect data on workers' occupations by coding them into classification systems that delineate major differences in tasks performed and in the skills, education, or training needed across jobs. 4 Detailed coding systems have evolved over time in response to changes in the occupational structure of the labor market. Tracking data on occupational changes over time requires a consistent coding system which, fortunately, has been created by Xie and Killewald (2012) and Xie et al. (2016). This system, based on classification of 41 occupational categories, was created to meet two conflicting objectives by (1) reducing the number of occupational categories and (2) grouping detailed occupations only when socioeconomic status and work content are sufficiently similar across these occupations.

The Technical Annex in Section 3.7 lists the occupational titles under each category for the 2000 Decennial Census. Table 3-18 in Section 3.6 presents the percentage shares of foreign-born male workers, from 1970 to 2012, within each occupational category. Table 3-19 does the same for female workers. In the last column of these tables, the share of workers with a bachelor's degree or higher in 2012 is given as a measure of the socioeconomic status of the occupational category (Hauser and Warren, 1997).

Comparing the proportion of foreign-born workers within each occupation to the overall proportion of foreign-born workers across all occupations (top row in both Tables 3-18 and 3-19) reveals whether foreign-born workers are overrepresented or underrepresented in a given occupational category. One clear pattern that emerges for both men and women is that immigrants are concentrated in two types of occupations: (1) those requiring low levels of education, such as "cleaning service and food service workers," "textile machine operators," and "personal service workers and barbers," and (2) professional occupations requiring high levels of education such as "physical scientists," "life scientists," "physicians, dentists, and related," and "architects," and "mathematicians." Some occupations, such as "social and recreation workers," "preschool and elementary teachers," "protective service workers," "secretaries," and "bookkeepers," have always had a low percentage of foreign-born workers. Changes in the share of foreign-born workers over time are most evident (in Tables 3-18 and 3-19) for "farmers and farm laborers," "laborers, except farm," and "computer specialists," for which the share of foreign-born workers changed from underrepresentation to overrepresentation (relative to the foreignborn share of workers across all occupations). A change in the opposite

<sup>&</sup>lt;sup>4</sup>See http://www.bls.gov/soc/revising\_the\_standard\_occupational\_classification\_2018.pdf [November 2016].

direction, from overrepresented to underrepresented, occurred for foreignborn workers occupied as "writers, artists, and media workers" and as "health technicians."

Table 3-1 shows the results for male workers when the 41 occupational categories are collapsed into 8 major occupational categories (using the Tier 2 classification in the Section 3.7 annex on occupational classification). Table 3-2 shows the same for female workers. This level of classification reveals other dimensions of the patterns described above.

First, while foreign-born workers are overrepresented in high-level professional groups that require the most education (such as scientists, engineers, and architects), they are underrepresented among other professionals, managers, and sales personnel. This pattern probably reflects the differing importance of verbal communication skills in technical occupations versus those requiring interaction with customers and subordinates, as well as occupational licensing requirements in some professions. Also noteworthy is that growth over the 1970-2012 period in the share of foreign-born workers in the first four occupational categories listed in Tables 3-1 and 3-2 has been slower than the growth in the share of foreign-born workers in the general labor force (across all occupations), resulting in a relative decline of foreign-born workers in these higher-status occupations. For the next four lower-status occupational categories, increases are generally observed in the share of foreign-born workers that outpace the share of foreign-born workers across all occupations. As in the detailed occupational tabulations in Tables 3-18 and 3-19, the increase in foreign-born workers' presence is most pronounced among "farmers and farm laborers," growing from 2.7 percent of all male workers in that occupational category in 1970 to 26.9 percent in 2012 and from 3.8 percent of all female workers in the category to 32.6 percent.

The disproportionate share of foreign-born workers in both the highestand lowest-skilled occupations may contribute to occupational segregation between foreign-born workers and native-born workers. To address this question, the panel computed the segregation index (Duncan and Duncan, 1955) between the two groups of workers across the 41 occupational categories, restricting the comparison to persons ages 25 to 64 years who were employed and working at least 50 weeks a year in a nonmilitary occupation. The segregation index can be interpreted as the minimum proportion for each type of worker whose occupation would have to be reassigned in order to achieve equal representation among foreign-born workers across all occupations. In the results presented in Table 3-3, the first row indicates trends in the segregation index for all workers, male and female. The next two rows break down the trends by gender. For all workers, the segregation index increased from 0.14 to 0.23 over the past five decades. The increasing trend is more pronounced for female workers (from 0.13 to 0.26) than

TABLE 3-1 Share of Male Workers, Ages 25-64, Who Were Born Abroad, by Major Occupational Category, by

Share	Share of Workers in Occupation Who Are Foreign Born (%)	ccupation Who	o Are Foreign	Born (%)	Share of All Workers with a Bachelor's or	Total Workers in Occupation in 2012
1970	1980	1990	2000	2012	Higher Degree in 2012 (%)	(U.Sborn and foreign-born)
Across All Occupations 4.9 Occupation	6.2	8.6	11.8	18.7	34.6	53,072,944
High-level professionals 7.6	9.2	10.9	14.4	19.3	90.5	3,684,121
Professionals 4.7	5.8	7.8	11.0	15.0	65.5	8,508,515
Managers 4.3	5.5	7.2	9.5	13.2	55.7	6,765,903
Sales workers 3.9	5.0	7.3	6.6	14.5	35.4	9,680,387
Service workers 7.4	9.5	13.2	16.5	25.2	15.7	6,025,253
Farmers and farm laborers 2.7	3.9	7.5	14.5	26.9	13.4	834,952
Skilled workers 4.7	5.8	7.7	10.8	19.3	7.5	8,114,032
Unskilled worker 5.0	6.7	9.4	13.6	24.4	6.2	9,459,781

TABLE 3-2 Share of Female Workers, Ages 25-64, Who Were Born Abroad, by Major Occupational Category, by 1970 2000

	Share of <sup>1</sup>	Share of Workers in Occupation Who Are Foreign Born (%)	cupation Wh	o Are Foreign	1 Born (%)	Workers with a Bachelor's or	Occupation in 2012
	1970	1980	1990	2000	2012	Higher Degree in 2012 (%)	(U.Sborn and foreign-born)
Across All Occupations	5.4	6.7	8.0	10.2	15.8	36.5	46,229,202
Occupation							
High-level professionals	12.1	11.3	10.8	15.1	19.4	93.0	1,957,552
Professionals	4.9	6.1	7.0	8.9	11.8	64.1	12,243,469
Managers	4.8	5.0	5.7	7.4	10.5	55.4	4,665,702
Sale workers	4.3	5.0	6.2	9.7	11.6	22.3	15,715,603
Service workers	6.1	8.8	11.9	15.8	26.9	8.6	8,559,180
Farmers and farm laborers	3.8	4.6	8.4	17.2	32.6	16.4	160,377
Skilled workers	5.5	8.7	11.3	15.0	22.7	13.1	678,948
Unskilled workers	7.9	11.3	13.5	17.9	29.0	6.9	2,248,371

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SOURCE: Analyses of 1970-2000 Decennial Census data and 2010-2012 American Community Survey data, accessed through the Integrated Public

metalworking, and transportation, laborers, except farm workers.

	1970	1980	1990	2000	2012
All Workers	0.14	0.16	0.16	0.18	0.23
Male Workers	0.14	0.15	0.14	0.16	0.21
Female Workers	0.13	0.17	0.18	0.20	0.26

NOTE: "Workers" is defined as those who are employed and working at least 50 weeks a year in a nonmilitary occupation.

SOURCE: Analyses of 1970-2000 Decennial Census data and 2010-2012 American Community Survey data, accessed through the Integrated Public Use Microdata Series.

for male workers (from 0.14 to 0.21). Across all three rows, the pattern is clearly in the direction of a rise in occupational segregation between foreign-born and native-born workers, perhaps reflecting the impact of growth in immigration from Mexico (see Chapter 2) and increased participation of Mexico-born immigrants in a relatively small number of service occupations.

### 3.3 EMPLOYMENT, WAGE, AND **ENGLISH-LANGUAGE ASSIMILATION PROFILES**

### **Employment**

Employment and other economic outcomes are key indicators of the pace and extent to which immigrants integrate into the United States. One of the most important labor market outcomes is the likelihood of working. One way to gain an understanding of employment trends is to examine the fraction of time worked or share of weeks worked over the year for different groups over time. Trends in mean fraction of time worked—calculated as the average number of weeks worked (including zeroes) divided by 52 for male immigrants relative to those of native-born men for ages 25-64 are given in Table 3-4. Table 3-5 presents parallel data for women.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup>Share of weeks worked in the year previous to the survey is an indicator of employment over the year; the variable combines the information of having worked in a particular week and being attached to the labor force over the year. Juhn and Murphy (1997) used share of weeks worked in the year previous to the survey, from the March Current Population Survey, to study trends in labor supply of married couples. Borjas (2003) investigated the impact of immigration on labor market outcomes of native-born, one of which was fraction of time worked.

Our initial calculations used the variable EMPSTAT (Employment Status) from PUMS files, which may not capture employment status of immigrants accurately for year 2000. The 2000

TABLE 3-4 Mean Share of Weeks Worked by Foreign-born and Native-born Men, by Decennial Census Year 1970-2000, and in 2012, Ages 25-64

Nativity	1970	1980	1990	2000	2012	
Native-born	88.8	83.5	82.7	82.5	75.9	
Foreign-born	86.1	80.3	78.9	78.6	81.1	
Africa	78.3	70.7	79.0	79.6	80.2	
Europe and Other	87.5	82.7	81.0	81.6	80.5	
Other Latin America	85.2	80.2	78.8	77.7	80.4	
Mexico	82.7	78.7	76.3	76.2	82.4	
Other Asia	82.0	71.8	76.0	78.3	78.0	
China	82.4	80.3	78.2	79.4	79.4	
India	81.5	86.8	86.2	85.4	87.9	
Philippines	84.0	83.8	84.2	81.3	79.9	
Vietnam	74.9	61.4	73.8	79.1	77.5	
			1.004			

SOURCE: Analyses of 1970-2000 Decennial Census data and 2010-2012 American Community Survey data, accessed through the Integrated Public Use Microdata Series.

These data indicate that, historically, foreign-born men have lagged slightly behind native-born; however, by 2012, foreign-born men in the United States were more likely to be employed than native-born men. The share of weeks worked for both native-born and foreign-born men has generally declined over the 1970-2010 period, although immigrants from Africa, India and Vietnam are notable exceptions. By the share-of-weeksworked metric, native-born men appear to have been disproportionately hit by the Great Recession, as is evident from the gap in native- and foreign-born men's share of weeks worked, with the latter 5.2 percentage points higher in 2012. However, the Great Recession also had an impact on immigrants in a way that is not captured by employment rates. A portion of immigrant unemployment was "exported" as foreign workers left the country; indeed, by some estimates, the unauthorized population alone declined by more than a million after 2007 (Passel and Cohn, 2014).

As shown in Table 3-5, both foreign-born and native-born women have dramatically increased their average number of weeks worked per year over the past 40 years. As with men, foreign-born women have had

Decennial Census may have had problems correctly classifying the employment status of people who had a job or business in the census reference week but who did not work during that week for various reasons. There is an underestimate of employment and overestimate of people not in labor force in that Census relative to the Current Population Survey's February to May 2000 sample.

For further description of the accuracy of data on employment status from the method matching the 2000 Census and the Current Population Survey, see Palumbo and Siegel (2004).

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100 THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

TABLE 3-5 Mean Share of Weeks Worked by Foreign-born and Native-born Women, by Decennial Census Year 1970-2000, and in 2012, Ages 25-64

Nativity	1970	1980	1990	2000	2012
Native-born	42.5	51.4	62.9	67.6	66.9
Foreign-born	40.9	47.8	54.1	55.0	58.7
Africa	38.5	45.1	57.2	60.2	64.4
Europe and Other	40.9	47.8	56.1	59.3	63.7
Other Latin America	49.7	54.5	59.1	59.6	64.2
Mexico	29.1	36.2	41.8	42.9	49.0
Other Asia	33.4	41.8	47.9	53.3	55.6
China	44.9	54.5	58.4	60.6	64.0
India	36.9	45.5	54.0	53.7	55.3
Philippines	51.1	64.9	73.3	73.0	74.0
Vietnam	21.1	41.8	52.7	62.4	66.1

SOURCE: Analyses of 1970-2000 Decennial Census data and 2010-2012 American Community Survey data, accessed through the Integrated Public Use Microdata Series.

lower employment prospects than U.S.-born women since 1980; in the case of women, the nativity gap in employment has generally grown over the period. These trends partly reflect the gender roles (labor force participation rates) in the immigrant countries of origin and their impact on the behavior of immigrant women in the United States. Foreign-born women have increasingly arrived from Asian and Latin American nations which, for cultural and other reasons, have lower female labor force participation rates than does the United States. Blau et al. (2011) examined women's labor supply assimilation profiles and found that foreign-born women from countries with high female labor force participation consistently work more than do immigrant women from countries with low female labor force participation, although both groups assimilate over time toward the employment patterns of native-born women.<sup>6</sup> Admission policies also play an important role in shaping employment rates of immigrant women. Many women are tied movers, arriving as spouses with visas that explicitly prohibit or severely limit their capacity to work in the United States. Nonetheless, data reported in Table 3-5 reveal that immigrant women, irrespective of the country or world region they are from, have made steady gains by the share-of-weeks-worked metric.

<sup>&</sup>lt;sup>6</sup>Blau et al. (2013) investigated second generation women's labor supply, fertility, and education and found evidence of intergenerational transmission of gender roles, suggesting an impact of immigrant parental behavior on second generation behavior. Empirical analysis by Fernandez and Fogli (2009) arrived at similar conclusions.

Tables 3-6 and 3-7 report the same statistics as Tables 3-4 and 3-5, respectively, but for the age group 25-54 instead of 25-64. As expected, the younger age group displays higher shares of weeks worked. For men, the effect is larger for natives than immigrants in recent years because fewer immigrants are ages 55-64 and the focus on the younger groups thus narrows the immigrant employment advantage. For women, on the other hand,

TABLE 3-6 Mean Share of Weeks Worked by Foreign-born and Native-born Men, by Decennial Census Year 1970-2000, and in 2012, Ages 25-54

Nativity	1970	1980	1990	2000	2012
Native-born	91.2	87.0	86.1	85.8	79.8
Foreign-born	88.4	81.8	80.1	80.0	83.5
Africa	78.0	70.2	79.2	80.1	81.1
Europe and Other	90.6	85.5	83.6	84.8	84.7
Other Latin America	85.9	81.0	79.4	79.0	82.4
Mexico	85.4	80.1	77.4	77.3	84.5
Other Asia	82.3	72.4	77.1	79.6	80.3
China	84.7	82.0	79.8	81.3	83.2
India	81.7	87.2	87.4	86.5	89.9
Philippines	85.8	86.3	85.8	83.0	83.0
Vietnam	71.2	62.6	75.3	80.8	80.8

SOURCE: Analyses of 1970-2000 Decennial Census data and 2010-2012 American Community Survey data, accessed through the Integrated Public Use Microdata Series.

TABLE 3-7 Mean Share of Weeks Worked by Foreign-born and Native-born Women, by Decennial Census Year 1970-2000, and in 2012, Ages 25-54

Nativity	1970	1980	1990	2000	2012	
Native-born	43.3	54.9	67.0	71.2	70.5	
Foreign-born	42.4	49.7	56.4	56.8	60.3	
Africa	38.1	46.1	58.2	61.7	65.9	
Europe and Other	42.2	50.3	60.4	63.7	67.4	
Other Latin America	51.7	55.8	60.5	61.3	66.0	
Mexico	31.0	37.7	43.4	44.1	50.1	
Other Asia	34.0	43.0	49.6	55.2	57.6	
China	45.1	56.5	61.2	63.3	67.3	
India	36.7	46.4	56.4	55.3	56.8	
Philippines	52.7	68.7	75.9	75.0	76.2	
Vietnam	21.1	43.2	55.0	65.3	70.8	

SOURCE: Analyses of 1970-2000 Decennial Census data and 2010-2012 American Community Survey data, accessed through the Integrated Public Use Microdata Series.

### THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

the gap in employment rates between immigrant and native-born women is wider in the younger age group than in the older one. This reflects differing patterns of employment for immigrant and native-born women of the same birth cohort.

As discussed in Section 3.2, the skill composition of new immigrants has evolved over time. Furthermore, the economy faced by new immigrants has exhibited long-term changes (for example, male labor force participation has fallen) and cyclical expansions and contractions. Thus, one would expect variation in cross-cohort shares of weeks worked at various points in time after their arrival to the United States. Tables 3-8 and 3-9 show the difference in the share of weeks worked for immigrant cohorts spaced 10 years apart, relative to the comparable cohort of native-born individuals. The approach used to analyze the share of weeks worked here is similar to that used by Borjas (2014b) to analyze wages. The regression model used to produce the estimates specifies the dependent variable as the fraction of time worked or share of weeks worked. Two models are estimated, one that controls only for age (introduced as a third order polynomial) and a second that controls for age and years of education. Both model specifications include arrival cohort dummies with the native-born group as the

**TABLE 3-8** Difference in Share of Weeks Worked for Immigrant Cohorts, Relative to Native-born Cohort, by Census Period, Men, Ages 25-64

		g for Age (cu e Migration	bic) Only				
Arrival Cohort	0	10	20	30	40		
1965-1969	-0.107	-0.010	0.005	0.013	0.022		
1975-1979	-0.183	-0.019	-0.019	0.046			
1985-1989	-0.185	-0.033	0.042				
1995-1999	-0.160	0.057					
	Controlling for Age (cubic) and Years of Education Years Since Migration						
Arrival Cohort	0	10	20	30	40		
1965-1969	-0.101	0.013	0.030	0.037	0.050		
1975-1979	-0.164	0.023	0.020	0.083			
1985-1989	-0.156	0.013	0.087				
1995-1999	-0.135	0.098					

SOURCE: Regression coefficients reported in Tables 3-20 and 3-21 (see Section 3.6).

**TABLE 3-9** Difference in Share of Weeks Worked for Immigrant Cohorts, Relative to Native-born Cohort, by Census Period, Women, Ages 25-64

		g for Age (cul e Migration	bic) Only		
Arrival Cohort	0	10	20	30	40
1965-1969	-0.014	-0.001	-0.023	-0.030	-0.005
1975-1979	-0.163	-0.074	-0.063	-0.016	
1985-1989	-0.255	-0.131	-0.032		
1995-1999	-0.295	-0.097			
		ng for Age (cul te Migration	bic) and Years	of Education	
Arrival Cohort	0	10	20	30	40
1965-1969	0.014	0.039	0.017	-0.001	0.026
1975-1979	-0.118	-0.006	-0.015	0.027	
1985-1989	-0.199	-0.070	0.021		
1995-1999	-0.256	-0.041			

SOURCE: Regression coefficients reported in Tables 3-22 and 3-23 (see Section 3.6).

reference group. The estimated regression coefficients for cohort dummies are reported in Tables 3-8 and 3-9. These model specifications, which are estimated from five consecutive annual cross-section datasets, establish trends in the share of weeks worked for different immigrant cohorts relative to the native-born.

Looking first at the results for men in Table 3-8, one can see that shortly after arrival to the United States, and as one would expect, immigrant men—especially recent cohorts—worked fewer weeks relative to native-born men. Immigrant men who arrived before 1970 appeared to fare better in this relative comparison than cohorts that arrived from the mid-1970s onwards. Controlling for age and years of education, an immigrant male who arrived between 1965 and 1969 worked 5 weeks less than a comparatively aged native-born male, while an immigrant who arrived between 1995 and 1999 experienced a disadvantage that had grown to 7 weeks. The trends in share of weeks worked as duration of stay lengthens can also be observed for different arrival cohorts. All of the arrival cohorts experienced at least modest gains in their employment prospects with longer U.S. residence; the 1975-1979 and 1995-1999 arrival cohorts experienced especially substantial employment boosts relative to native-born men over time, even

just 10 years after immigrating. The panel concludes that, for these cohorts of immigrant men, after an initial period of adjustment in which their share of weeks worked is lower than natives, they became slightly more likely to be employed than their native-born age-peers.

This analysis of Decennial Census data is broadly consistent with what has been shown in the literature. Duncan and Trejo (2012) showed that the initial employment gap is widest among men with a high school education or less and that the difference in employment rates between immigrant and native-born men is due mainly to differences in labor force participation and not due to differences in unemployment.<sup>7</sup>

Immigrant women, who display a lower share of weeks worked than do immigrant men, also typically have a lower share of weeks worked than do native-born women of the same age. However, again, the Decennial Census data are consistent with the literature in showing that their probability of being employed relative to native-born women rises with length of U.S. residence (see Blau et al., 2011) despite some cyclical changes. The 1965-1969 arrival cohort appears to be an exception to the pattern of convergence, whereas the 1995-1999 cohort, which starts the furthest below its native-born age-peers, exhibits the largest observed 10-year increase in the relative share of weeks worked. This indicates that, as immigrant women are exposed to U.S. labor market conditions and social norms, they grow increasingly likely to participate in the labor force and find employment. Also, many immigrant women experience a change in their visa status in the first 10 years, which improves their chances of finding employment.8

### **Wage Assimilation Profiles**

Alongside employment prospects, tracing the wage trajectories of immigrants is crucial to understanding their economic well-being and their contribution to the receiving country's economy. Wage trajectories indicate the initial earnings and then the subsequent wage growth of workers as experience increases. While immigrants contribute to the economy by permitting greater specialization among workers, an immigrant's contribution will be greater if he or she finds a job in which his or her skills are fully utilized, and rising wages may be a sign of improving job match quality. Rising wages for skilled immigrants may also be a sign that they are reach-

<sup>&</sup>lt;sup>7</sup>For definition of labor force participation, employment, and unemployment, see http:// www.bls.gov/bls/cps\_fact\_sheets/lfp\_mock.htm [November 2016].

<sup>&</sup>lt;sup>8</sup>The gender distribution of persons receiving lawful permanent resident status in fiscal year 2013 is skewed toward women under the categories of Family-Sponsored and Immediate Relatives of U.S. Citizens (54.2%), while immigrants admitted under Employment based preference are more likely to be men (51%). See Annual Flow Report 2014 by Department of Homeland Security and Table 9 in U.S. Department of Homeland Security (2014).

ing positions in which they have positive spillovers on other workers. In this section, the panel addresses this facet of the changing economic status of immigrants. The key questions are: How closely do the earnings of immigrant and native-born workers track as worker experience increases, and how has the relationship changed over time?

The earnings gap varies between men and women workers and also across immigrants' source countries. The first picture of relative wages of immigrants and natives is painted by Tables 3-10 and 3-11. These two tables use Decennial Census and ACS data to show hourly wages and annual earnings for men and women by nativity (native-born and foreignborn), with further detail by immigrant source country, but not differentiated by immigrants' length of time in the United States. The hourly wages of foreign-born men in 1970 were 3.7 percent higher than those of nativeborn male workers, and their annual earnings were very slightly higher. In subsequent decades, the gap reversed and widened such that, by 2012, the average hourly wage of foreign-born male workers was 10-11 percent lower than that for their native-born counterparts. For women, relative wages evolved from rough parity in 1970 to a 7 percent gap in favor of native-born women by 2012.

These averages conceal large differences among world regions and specific source countries. For foreign-born men, workers from Europe, Oceania, and Canada; India; Other Asia; and, since 1990, China perform better in terms of wages and earnings than native-born men. This is also generally true of immigrants from Africa. In contrast, immigrant workers from Latin America (including Mexico) and Vietnam earn considerably less than native-born workers, while immigrant workers from the Philippines earn about the same as, or in some years a bit less than, native-born men.

The broad outlines are similar for women, although wage and income gaps are much smaller. In general, women from Asia fare well in wage comparisons, as do women from Africa and from Europe, Oceania, and Canada, while women from Latin America, particularly Mexico, and from Vietnam tend to have lower wages than the native-born. One notable observation is that, among women, immigrants from the Philippines earn more than native-born women.

One gender difference of note involves the changing standard (that is, the native-born wages) to which immigrants' wages are being compared over time. For men, the wages of natives have been quite flat over the past few decades, and consequently the growing wage gap by nativity implies an absolute decline in the real wages and earnings of male immigrants who arrived in later decades. In contrast, the real wages of native-born women have been rising such that the widening wage gap by nativity among women is consistent with flat or rising wages of female immigrants.

A considerable literature has gone beyond the simple gap between aver-

Vietnam

### THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

TABLE 3-10 Average Hourly Wages and Earnings of Employed Foreignborn and Native-born Men, by Decennial Census Year 1970-2000, and in 2012, Ages 25-64, in 2012 Dollars

	1970		1980	1980	
Nativity	Hourly	Annual	Hourly	Annual	
Native-born	\$30.25	\$62,398	\$32.50	\$61,522	
Foreign-born	31.38	62,443	31.52	57,115	
Africa	32.90	61,403	39.55	69,027	
Europe, Oceania, Canada, and Other	34.32	69,201	34.77	66,648	
Other Latin America	24.86	47,916	27.79	48,049	
Mexico	20.37	38,631	22.31	35,735	
Other Asia	34.41	68,115	37.73	63,138	
China	27.16	55,729	29.95	57,122	
India	36.82	68,616	38.95	78,138	
Philippines	25.86	53,699	34.06	57,296	

NOTE: Hourly wages are computed by dividing annual earnings from wages and self-employment income by weeks worked and average hours per week. The sample is men ages 25-64 who worked at some point in the preceding calendar year and were not enrolled in school.

50,825

21.52

36,569

23.95

age native-born and immigrant wages to examine the evolution of the gap by immigrant time spent in the United States. The literature finds that the wage gap between native-born and foreign-born workers narrows over time as the latter accumulate job experience in the U.S. labor market and invest in their skills. Chiswick (1978) pioneered this work, comparing the earnings of immigrants and native-born male workers of different ages at a point in time using data from the 1970 Decennial Census. He estimated that, at the time of arrival, immigrants earn about 17 percent less than natives and that it takes 10-15 years to close the wage gap, depending on the source country of the immigrant. Chiswick also found that immigrants often experience

107

1990

SOCIOECONOMIC OUTCOMES OF IMMIGRANTS

Hourly	Annual	Hourly	Annual	Hourly	Annual	
\$30.99	\$60,647	\$32.80	\$65,557	\$32.00	\$65,674	
29.84	54,736	30.02	54,308	28.62	55,824	
34.36	69,100	33.66	67,018	35.80	63,101	
36.52	71,930	40.71	82,044	43.40	89,725	
25.81	45,716	26.20	45,577	23.42	43,929	
19.10	30,295	20.52	32,600	17.34	31,186	
34.88	65,476	36.42	67,684	33.70	68,155	
33.02	63,207	40.52	71,262	38.07	76,179	
49.46	86,094	46.47	93,211	47.63	99,772	
31.79	55,119	33.13	55,357	29.87	56,199	
24.51	44,433	28.26	49,102	27.17	53,630	
SOURCE: Analyses of 1970-2000 Decennial Census data and 2010-2012 American Commu-						

2012

nity Survey data, accessed through the Integrated Public Use Microdata Series.

faster wage growth relative to the native-born, in part because they are starting from a position that allows for catching up (that is, if their initial jobs do not reflect their earnings potential). Since Chiswick's 1978 study, the economic assimilation literature has extended the analysis to take into account changes in the attributes of successive immigrant arrival cohorts, as well as the role of immigrant age at arrival (Borjas, 1985; Borjas and Tienda, 1985; Carliner, 1980; DeFreitas, 1980; Long, 1980). These studies, based on cross-sectional data, all concluded that immigrant workers experience rapid wage growth compared to native-born workers of the same generation.

THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

TABLE 3-11 Average Hourly Wages and Earnings of Employed Foreignborn and Native-born Women, by Decennial Census Year 1970-2000, and in 2012, Ages 25-64, in 2012 Dollars

	1970		1980	1980		
Nativity	Hourly	Annual	Hourly	Annual		
Native-born	\$19.32	\$27,793	\$20.10	\$27,100		
Foreign-born	19.04	27,320	20.31	26,501		
Africa	19.04	27,439	22.55	29,448		
Europe, Oceania, Canada and Other	19.94	28,482	20.70	27,056		
Other Latin America	16.95	25,502	18.88	25,320		
Mexico	14.80	18,207	15.73	17,814		
Other Asia	19.20	26,626	20.90	26,331		
China	19.35	29,146	19.48	27,559		
India	28.91	31,371	25.55	35,882		
Philippines	20.57	31,521	27.42	36,993		

NOTE: Hourly wages are computed by dividing annual earnings from wages and selfemployment income by weeks worked and average hours per week. The sample is women ages 25-64 years who worked at some point in the preceding calendar year and were not enrolled in school.

19.18

Vietnam

23,709

17.29

22,686

Borjas (1985) argued that there is an inherent weakness in estimating the dynamic process of wage assimilation using a single time-point snapshot, due to the changing skill sets of successive immigrant arrival cohorts. The Chiswick approach assumes that outcomes for immigrants who in 1970 had been in the United States for 10 years represent the likely outcomes of 1970 new arrivals 10 years later, in 1980 (or conversely, that the outcomes of new arrivals in 1970 represent the outcomes established immigrants likely had in 1960). By using census data from both 1970 and 1980, Borjas was able to look at the actual outcomes in 1980 of immigrants

ase 1:18-cv-00068 Document 611-1 Filed on 11/04/22 in TXSD Page 684 of 7

2012

SOCIOECONOMIC OUTCOMES OF IMMIGRANTS

2000

Hourly	Annual	Hourly	Annual	Hourly	Annual	
\$20.68	\$31,531	\$23.80	\$37,869	\$23.85	\$40,996	
20.99	30,691	22.99	34,214	22.11	36,333	
27.83	37,005	25.59	40,344	22.75	39,024	
2298	33,195	26.55	41,987	29.45	48,341	
18.63	27,212	20.76	29,602	18.14	25,690	
13.79	17,027	16.23	19,702	12.87	17,865	
22.21	32,606	24.15	36,608	22.99	37,185	
21.60	35,624	27.75	44,377	27.86	49,634	
28.11	43,624	31.31	53,477	33.97	60,320	
26.61	42,105	29.17	46,317	27.48	49,914	
19.51	30,483	\$20.0	30,189	17.51	29,575	
SOURCE: Analyses of 1970-2000 Decennial Census data and 2010-2012 American Commu-						

who had arrived in 1970, thus separating arrival cohort9 skill effects from human capital accumulation effects on earnings growth. Borjas found that

within-cohort earnings growth is slower than predicted from single-census (snapshot) regression analysis. Borjas (1995a) updated these findings by

nity Survey data, accessed through the Integrated Public Use Microdata Series.

including 1990 census data, concluding that the 1980 and 1990 arrival

<sup>9</sup>In this context, "arrival cohort" refers to a group of immigrants who arrived in the United States at the same time or during the same time period.

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109

**TABLE 3-12** Weekly Wage Assimilation of Male Immigrants, by Cohort (percentage difference between native-born and foreign-born wages)

	Controlling for Age (cubic) Only Years Since Migration						
Arrival Cohort	0	10	20	30	40		
1965-1969	-0.235	-0.120	-0.020	-0.014	0.176		
1975-1979	-0.314	-0.185	-0.176	-0.136			
1985-1989	-0.331	-0.269	-0.252				
1995-1999	-0.273	-0.269					
	Years Sinc	ng for Age (cul re Migration					
Arrival Cohort		0 .	bic) and Years	of Education	40		
Arrival Cohort	Years Sinc	e Migration					
	Years Sinc	te Migration 10	20	30	40		
1965-1969	Years Sinc 0 -0.172	10 -0.030	20 0.099	30 0.133	40		

NOTE: Regression coefficients reported in Section 3.6, Tables 3-24 and 3-25.

cohorts of immigrants are unlikely (and less likely than earlier cohorts) to catch up and match the wages of their native-born peers in their lifetimes.

Following Borjas (2016a), the panel investigated the rate of economic assimilation by calculating age-adjusted wage differentials between each immigrant cohort and its native-born cohort, using a regression estimated separately for each year—1970, 1980, 1990, 2000, and 2010-2012—from the Decennial Census and ACS IPUMS data. The dependent variable is the log of weekly earnings, and the regressors initially include age (introduced as a third-order polynomial, or cubic term) and arrival-cohort fixed effects, and then education as a third regressor. Tables 3-12 and 3-13 show how the wages of immigrants relative to native-born workers of the same age evolve with time in the United States, computed separately for different immigrant arrival cohorts. Male immigrants who arrived between 1965 and 1969 began with an initial wage disadvantage of 23.5 percent, but the gap narrowed to 12 percent 10 years after arrival. By 40 years after arrival, this immigrant arrival cohort earned 17.6 percent more per week than com-

 $<sup>^{10}\</sup>mathrm{Age}$  is introduced as a third-order polynomial to control for nonlinear effects of age on earnings.

<sup>&</sup>lt;sup>11</sup>See Tables 3-24 through 3-27 in the Technical Annex (Section 3.6) for full regression results.

**TABLE 3-13** Weekly Wage Assimilation of Female Immigrants, by Cohort (percentage difference between native-born and foreign-born wages)

	Controlling for Age (cubic) Only Years Since Migration					
Arrival Cohort	0	10	20	30	40	
1965-1969	-0.021	0.068	0.083	0.023	0.133	
1975-1979	-0.082	-0.002	-0.053	-0.031		
1985-1989	-0.184	-0.138	-0.168			
1995-1999	-0.216	-0.239				
1993-1999	-0.210	0.237				
1773-1777	Controllin	ng for Age (cul	bic) and Years	of Education		
Arrival Cohort	Controllin	ng for Age (cul	bic) and Years	of Education	40	
	Controllin Years Sinc	ng for Age (cul te Migration				
Arrival Cohort	Controllin Years Sinc	ng for Age (cul te Migration	20	30	40	
Arrival Cohort 1965-1969	Controllin Years Sinc 0	ng for Age (cul e Migration 10 0.173	20 0.202	30 0.133	40	

NOTE: Regression coefficients reported in Section 3.6, Tables 3-26 and 3-27.

parable native-born males. Later-arriving cohorts began with a larger wage disadvantage: 31.4 percent lower than native-born males for those admitted between 1975 and 1979, 33.1 percent lower for those admitted between 1985 and 1989, and 27.3 percent lower for those admitted between 1995 and 1999. Moreover, the wage disadvantage does not disappear for these arrival cohorts, and the rate at which it narrows has slowed. For example, the 1965 cohort made up 21.5 percentage points of the gap in their first 20 years, whereas the 1975 cohort made up only 13.8 percentage points and the 1985 cohort only 7.9 percentage points.

When the panel additionally controlled for education, which allows for comparison of the degree to which immigrants catch up with their nativeborn peers with similar skills, the sizes of the immigrant-to-native-born wage gaps are much reduced. Moreover, it is only the two most recent arrival cohorts that have not yet closed the gap with their native-born peers with the same education. Of these two cohorts, 1985-1989 arrivals have nearly closed the gap after 20 years in the United States, earning only 2.6 percent less than natives with the same education.

ase 1:18-cv-00068 Document 611-1 Filed on 11/04/22 in TXSD Page 687 of 7

### THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

Since immigrants are disproportionately low-skilled, it is also likely that growing wage inequality in the economy generally, which is associated with a widening wage gap between high- and low-skilled workers, has adversely affected immigrant entry wages and impeded their capacity to catch up to natives. Putting this somewhat differently, even if immigrant skills had remained constant, their wages relative to natives would have fallen. Borjas (1995a) examined relative wages during the 1980s (a time when low-skilled immigrant workers fared particularly poorly) and found that, although the change in wage structure accounted for some (16-17%) of the decline in the relative wages of immigrants, most of it remained and was attributable to declining educational attainment relative to natives. 12 A larger role for wage structure was obtained by Butcher and DiNardo (1998). They analyzed the role of the changing wage structure in the native-immigrant wage gap by estimating wage distributions of male and female immigrants who were recent arrivals in 1970, simulating what would have happened had they faced the wage structure obtaining in 1990. The counterfactual analysis allowed the researchers to tease out how much of the gap in nativeimmigrant wage distribution could be attributed to changing immigrant skills versus change in the wage structure. Depending on where a worker was along the wage distribution, the wage structure was found to have dramatic effects. For male workers at the higher end of the distribution, the wage structure changes explained 68 percent of the increase in wage gap.

The following key conclusions can be drawn from the above analyses. As their time spent in the United States lengthened, male immigrants who arrived between 1965 and 1969 experienced rapid relative growth in their wages, which allowed them to close the gap with natives. This indication of economic integration has slowed somewhat in more recent decades; the aging profile for relative wages has flattened across arrival cohorts, indicating a slowing rate of wage convergence for immigrants admitted after 1979. These overall conclusions hold after controlling for immigrants' educational attainment, although the relative wage picture for immigrants is considerably more favorable when education is controlled for.

Compared to male immigrants of the same cohort, female immigrants start off with a less dramatic wage disadvantage, particularly if earlier cohorts are considered, but they experience slower growth in their wages relative to their native-born than do male immigrants (compare Tables 3-12

<sup>&</sup>lt;sup>12</sup>As discussed in Chapter 6, Card (2009) and Blau and Kahn (2015) examined the wage inequality-immigration relationship from the opposite direction by investigating the impact of immigration on wage inequality. Immigrants are concentrated in the tails of the skill-and-wage distribution and thus potentially increase inequality among the full population (immigrants and native-born combined) due to compositional effects. Both studies found, however, that immigration can account for only a very small share of the rise in overall U.S. wage inequality between 1980 and 2000 (Card, 2009) or between 1980 and 2010 (Blau and Kahn, 2015).

and 3-13). The 1995-1999 arrival cohort did not experience any relative wage growth during its first 10 years in the United States. Much of the wage disadvantage of female immigrants disappears, however, when years of education are accounted for (lower half of Table 3-13), indicating that education differences explain much of the wage difference for immigrant women compared with native-born women. Even the large wage disadvantage for the 1995-1999 cohort is mostly accounted for by that group's lesser educational attainment compared with native-born females. Recent trends in part reflect increasing rates of inflow of Mexican immigrants with low education during the 1990s (Borjas, 2014b).

Although the use of repeated cross-sections is a great improvement over use of a single cross-section, the fact that some immigrants return home means that estimated assimilation may inadvertently reflect a change in the composition of a cohort, rather than a trend toward wage parity for individuals within the cohort. The ideal dataset would be a longitudinal one following immigrants (and the corresponding native-born cohort) over time, yet retaining the large sample size of Decennial Census and ACS data. For this reason, Lubotsky's (2007) work on immigrant wage assimilation is of seminal importance because it is based on longitudinal data that link the 1994 Current Population Survey (CPS) with administrative Social Security records in order to trace individuals' earnings history back to 1951. That longitudinal analysis revealed smaller entry-level wage gaps and slower wage growth among immigrants (compared with native-born peers) relative to the estimates derived from cross-section data. Consistent with results derived by Trejo (2003) and Blau and Kahn (2007), Lubotsky also found a slower assimilation process for Latin American immigrants compared with immigrants with other regional origins. He attributed part of the faster wage growth found in cross-section data to the uncaptured effect of return migration of low-earning immigrants. Immigrants who stay in the United States earn more than those who decide to leave; therefore, estimates of the rate of wage convergence derived from a census or sample of immigrants who remain in the United States are biased upward.<sup>13</sup>

Dustmann and Görlach (2014), using estimates of out-migration rates from various cross-country empirical studies, confirmed that out-migration is not random. Emigration rates (from the receiving country) differ by source country, age at arrival in the receiving country, continuing source country ties, legal status, and economic conditions in the source country that vary over time and across place. All these factors make generaliza-

<sup>&</sup>lt;sup>13</sup>The opposite situation will take place when high-wage earning immigrants leave, the path of wage convergence calculated from cross-section data will be biased downward. State et al., (2014) found evidence of out-migration of high-skilled workers from the United States in years following the "dot-com" crash of 2000-2002.

# ase 1:18-cv-00068 Document 611-1 Filed on 11/04/22 in TXSD Page 689 of $70^\circ$

THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

tions about behavior and motivation of immigrants difficult. Immigrants from developed countries are more likely to emigrate (from their receiving country) compared with immigrants from less-developed countries. Moreover, immigrants coming from poor nations are more likely to stay even if they fare poorly in the host country's labor market. There is some evidence that immigrants closer to retirement age are more likely to leave their host country, particularly if they have immediate relatives in the source country. However, hailing from economically prosperous regions of a source country improves the likelihood of staying in the host country because remittance income has superior investment opportunities. Also, refugees are less likely to leave than economic immigrants (Dustmann and Görlach, 2014).

## English-Language Proficiency and Assimilation

We suggested above that if immigrants acquire country-specific skills more rapidly than native-born workers with similar attributes, wage convergence will take place. Language skills may be particularly important. Funkhouser and Trejo (1995) found that the changing composition of immigrants accounted in part for the reduction in entry wages described above. Trejo (2003) noted that the falling average skills among U.S. immigrants relative to their native-born peers reflects the rising share from Latin America who tend not to be fluent in English upon arrival (one of the skills rewarded in the U.S. labor market). Bleakley and Chin (2004) showed a positive impact of English-language skills on earnings for individuals who immigrated to the United States as children. Analyses by Dustmann and Fabbri (2003) on immigrants to the United Kingdom and by Berman and colleagues (2000) on Soviet immigrants to Israel found that proficiency in the host country's language was positively associated with wages. Lewis (2012) used data from the 2000 Decennial Census and the 2007-2009 ACS to estimate the impact of English-language skills on relative wages of immigrants when new immigrants enter the labor market. Immigrants with advanced English-language skills suffered less negative wage impact than did immigrants with poor English-language skills. Comparing the wage gap between black immigrants and native-born blacks, Hamilton (2014) found that black immigrants from English-speaking countries eventually achieved wage parity with native-born blacks, but their counterparts from non-English-speaking countries did not.

Following Borjas (2014b), Figures 3-6 and 3-7 show the assimilation profile for English-language proficiency of male and female wage-earning immigrants by arrival cohort. The age-adjusted probability of "speaking English very well" is calculated from a linear probability model estimated separately for datasets from the Decennial Census Public Use Microdata Series for 1970-2000 and the ACS Public Use Microdata Series for 2010-

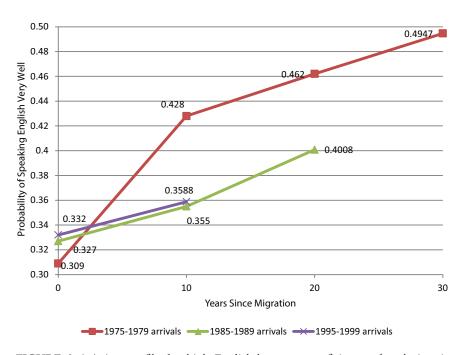


FIGURE 3-6 Aging profile for high English-language proficiency of male immigrants (wage earners), by arrival cohort.

NOTE: Regression coefficients reported in Table 3-28 (see Section 3.6).

2012, restricting the sample to immigrants originating in countries outside the British sphere of influence.<sup>14</sup> The dependent variable is a dummy that is set to unity if the immigrant speaks only English or speaks English very well and is set to zero otherwise. The regressors include the worker's age (introduced as a cubic polynomial). This regression analysis gives the following results:<sup>15</sup>

<sup>&</sup>lt;sup>14</sup>The intent here was to limit the sample to immigrants who had the chance to learn English over time, after arriving in the United States. The countries in the British sphere of influence are where English is widely spoken, which implies that immigrants from those source countries would be fluent in English at the time of entry into the United States. These countries are Antigua-Barbuda, Australia, Bahamas, Barbados, Belize-British Honduras, Bermuda, Canada, Dominican Republic, Grenada, Guyana/British Guiana, Ireland, Jamaica, Liberia, New Zealand, Northern Ireland, South Africa, St. Kitts-Nevis, St. Vincent, Trinidad and Tobago, and the United Kingdom.

<sup>&</sup>lt;sup>15</sup>For detailed results, see Tables 3-20 through 3-23 in the Technical Annex, Section 3.6.

#### 116 THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

- Male immigrants who arrived between 1975 and 1979 experienced a 12 percentage point increase in their fraction with English proficiency by 1990 and a 19 percentage point increase by 2012.
- The age-language proficiency profile for this arrival cohort is steeper than that of the 1985-1989 and 1995-1999 arrival cohorts.
- In the case of female immigrants, all arrival cohorts have a steeper age-language proficiency profile than male immigrants, although the general result holds that immigrants who arrived during the late 1980s and 1990s are slower in accumulating language skills than those who arrived in the late 1970s.

Figures 3-8 and 3-9 repeat the age-adjusted probability calculations but for a lower threshold of language proficiency: the probability of speaking English well (or better). These trends generally corroborate the finding discussed above that earlier cohorts of immigrants experienced more rapid language assimilation than recent cohorts. The relative slowdown of language assimilation may again be partly explained by high rates of immigra-

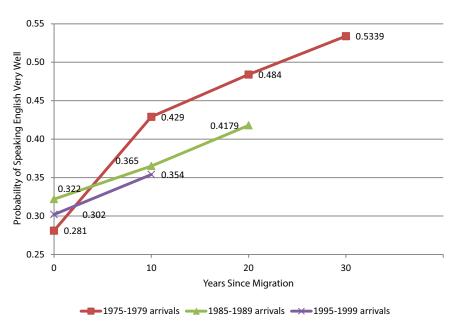


FIGURE 3-7 Aging profile for high English-language proficiency of female immigrants (wage earners), by arrival cohort.

NOTE: Regression coefficients reported in Table 3-29 (see Section 3.6).

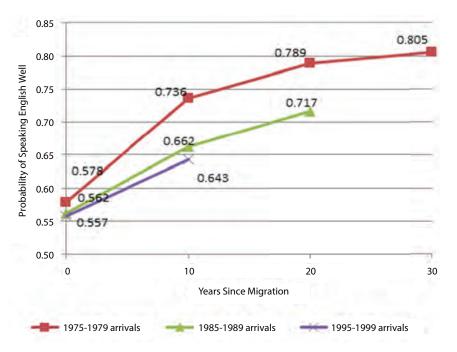


FIGURE 3-8 Aging profile for moderate English-language proficiency of male immigrants (wage earners), by arrival cohort.

NOTE: Regression coefficients reported in Table 3-30 (see Section 3.6).

tion from Mexico during the 1990s. Lazear (2007) found that Mexicans start below immigrants from other countries in terms of English-language fluency and never catch up; in general, non-Hispanics were more fluent than Hispanics at all times after arrival in the United States. One possible explanation, articulated by Borjas (2014b, p. 35), is "immigrants who enter the country and find a large welcoming ethnic enclave have much less incentive to engage in these types of investments since they will find a large market for their pre-existing skills."

Immigration policy also plays a role in patterns of wage convergence. Specifically, immigrants who enter the United States on work visas have different assimilation profiles than those on nonwork visas. Borjas and Friedberg (2009) examined the uptick in relative entry wages of immigrants who arrived between 1995 and 2000 and conjectured that expansion of the H1-B visa program was partly responsible. Chen (2011) found that work-visa holders with science and engineering degrees earned abroad experienced a higher rate of wage growth than nonwork-visa holders with

#### 118 THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

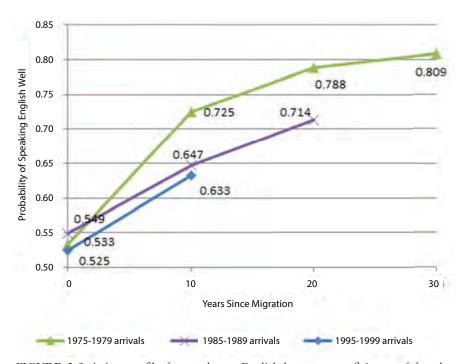


FIGURE 3-9 Aging profile for moderate English-language proficiency of female immigrants (wage earners), by arrival cohort.

NOTE: Regression coefficients reported in Table 3-31 (see Section 3.6).

these degrees, but they did not reach economic parity with work-visa holders who had science and engineering degrees earned from U.S. institutions. The wage disadvantage was greater for nonwork-visa holders because they tended to concentrate in fields other than science and engineering, where there is less standardized, technical knowledge that is invariant and transferable across national boundaries. Chen also found that immigrant workers who possessed work visas upon first entry to the United States did not suffer from an earnings penalty, providing support for the notion that assimilation in these fields can be achieved without host-country-specific human capital. Chen attributed this finding to the universalism of science and engineering training and degrees (Chen, 2011). Orrenius and Zavodny (2014) investigated earnings of immigrants under Temporary Protected Status, a status typically granted if dangerous conditions are present in the immigrants' home country due to war or a natural disaster. Using ACS data from 2005-2006, the authors compared labor market outcomes of men

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and women immigrants from El Salvador, Mexico, and Guatemala. Their results suggested that being given legal status, even on a temporary basis, leads to better employment prospects for women and higher earnings for men relative to other immigrants with similar skills who were not granted Temporary Protected Status.

Evidence also exists indicating that place of education and source country characteristics influence labor market outcomes of U.S. immigrants. Zeng and Xie (2004) used data from the 1990 Decennial Census and the 1993 National Survey of College Graduates to compare earnings among native-born whites, native-born Asian-Americans, Asian immigrants educated in the United States, and Asian immigrants who completed education in their home country. Earnings differences between native-born groups and U.S.-educated Asian immigrants were small to negligible; however, Asian immigrants educated abroad earned 16 percent less than their counterparts who received U.S. degrees. Blau et al. (2011) investigated the impact of source country characteristics on the participation of married immigrant women in the U.S. labor force. They found that women immigrants from countries with high female labor force participation rates not only worked a greater number of annual hours than female immigrants from countries with low female labor force participation rates, they closed the gap with native-born women in 6 to 10 years. Borjas (2016a) revisited cohort effects and found that, in addition to average educational attainment at time of entry, gross domestic product (GDP) of source country affected economic assimilation of an immigrant cohort in its first 10 years. One explanation advanced by Borjas for the positive correlation between GDP of source country and economic assimilation is that skills of immigrants from highincome industrialized economies are more easily transferable to U.S. labor markets.

#### 3.4 POVERTY AND WELFARE UTILIZATION

Comparative information about income status and welfare program use by different populations is essential to understanding the balance of fiscal benefits and the burdens that immigrants and their families bring to U.S. society. 16 Examining trends related to native and immigrant poverty rates and program use over time also provides a perspective on assimilation different from but related to the trends associated with wages and employment. Because welfare programs comprise significant shares of federal, state, and local budgets, usage patterns by immigrants that differ from usage patterns of the native-born would imply that immigrants impose different fiscal burdens on these welfare programs.

<sup>&</sup>lt;sup>16</sup>The terms "safety net" and "welfare" are used interchangeably in this section.

THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

By design, low-income households are more likely to access public benefits programs than are high-income households. As shown in Table 3-14 and Figure 3-10, immigrants experience higher poverty rates compared to the native-born; although, as the table indicates, this is not the case for

**TABLE 3-14** Percentage of Immigrants and Their Children in Poverty and Near Poverty, by Source Country and World Region of Birth, 2011

	In Poverty		In or Near Poverty		
	Immigrants	Immigrants and Their U.Sborn Children	Immigrants	Immigrants and Their U.Sborn Children	
Country of Birth					
Mexico	30.1	34.8	62.9	67.8	
Honduras	32.7	34.0	66.4	66.3	
Guatemala	28.5	31.4	63.2	66.9	
Dominican Republic	21.2	25.7	49.0	54.8	
Haiti	23.7	25.2	49.5	49.5	
Cuba	22.9	24.3	48.7	49.4	
Ecuador	19.2	22.6	43.0	46.7	
El Salvador	20.3	22.0	53.2	56.7	
Laos	13.8	18.0	32.7	44.0	
Vietnam	17.4	17.6	37.6	38.3	
Colombia	14.9	16.0	31.0	33.6	
Jamaica	12.2	16.0	33.5	37.1	
Iran	16.2	15.2	32.7	32.8	
USSR/Russia	12.5	12.9	12.8	30.7	
China	14.0	13.6	33.4	30.8	
Peru	10.1	13.6	32.4	36.4	
Pakistan	11.0	11.9	30.6	32.9	
Korea	9.7	11.1	23.8	24.8	
Japan	12.1	10.1	26.2	25.0	
Canada	9.1	8.0	19.4	18.1	
Poland	7.2	7.5	32.1	30.5	
United Kingdom	5.6	7.2	16.9	21.4	
Germany	6.7	6.8	23.7	22.4	
India	6.7	6.2	15.4	15.5	
Philippines	6.3	5.5	19.4	20.1	
Region of Birth					
Middle East	27.6	28.2	45.1	47.9	

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TABLE 3-14 Continued

	In Poverty		In or Near Po	verty
	Immigrants	Immigrants and Their U.Sborn Children	Immigrants	Immigrants and Their U.Sborn Children
Central America (excludes Mexico)	25.2	26.8	56.8	59.1
Sub-Saharan Africa	22.9	24.6	42.9	46.2
Caribbean	19.4	22.0	43.4	46.2
South America	14.5	16.0	34.6	37.1
East Asia	12.4	12.8	30.0	30.6
Europe	9.5	10.1	27.6	27.8
South Asia	8.9	8.9	20.2	21.1
All Immigrants	19.9	23.0	43.6	47.6
All Natives	13.5		31.	1
Children of Immigrants (<18)	32.1		59.2	2
Children of Natives (<18)	19.2		39.3	3

NOTE: The poverty and near-poverty percentages shown for "all natives" exclude U.S.-born children under age 18 of foreign-born fathers. "Immigrants and Their U.S.-born Children" includes U.S.-born children under age 18 of foreign-born fathers. "Near poverty" is defined as less than 200 percent of the federal poverty threshold.

SOURCE: Data from Camarota (2011, Table 10), based on the March 2011 Current Population Survey public use file.

immigrants from a subset of source countries (those toward the bottom of the list). In 2011, 19.9 percent of immigrants and 32.1 percent of children of immigrants<sup>17</sup> (under 18) lived in poverty, compared to 13.5 percent of native-born persons and 19.2 percent of children of native-born. Suro et al. (2011) found that, for the period 2000 to 2009, immigrants living in suburbs experienced higher rates of poverty relative to the native-born living in suburbs; but their contribution to the growth of poor populations living in these areas ("the suburbanization of poverty") was lower relative to that of the native-born.

<sup>&</sup>lt;sup>17</sup>Immigrants are defined here as the foreign-born as identified by the nativity variable in the CPS; the category thus includes naturalized citizens, lawful permanent residents, nonimmigrant visa holders, refugees, asylees, and unauthorized immigrants.

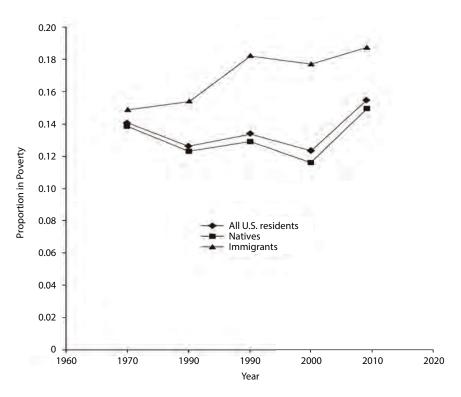


FIGURE 3-10 Poverty rates for all U.S. residents, natives, and immigrants, 1970-2010. SOURCE: Reproduced from Card and Raphael (2013, Fig. 1.1, p. 5).

The primary reasons that immigrants experience higher levels of poverty than the native-born are that (as shown earlier in Tables 3-4, 3-5, 3-10, and 3-11) they are relatively less likely to be employed and they earn lower wages on average. And, as the analysis on fraction of time worked and wage assimilation in Section 3.3 shows, it takes some time for newly arrived immigrants to move up the job ladder and for the poor among them to lift themselves and their children out of poverty.

Another reason for the higher immigrant poverty rates stems from the shift in source countries away from Europe toward poorer countries in Asia and Latin America. Table 3-14, which shows the percentage of immigrants and their children in poverty and near poverty, reveals the wide variation in poverty experienced by immigrants from different countries. Poverty rates are higher for groups that form a larger proportion of the total immigrant population relative to those that comprise a smaller proportion (Table 2-1).

For example, 34.8 percent of Mexican immigrants and their U.S.-born children live in poverty, which is more than five times the corresponding statistic for immigrants and their U.S.-born children from countries such as India and the Philippines.

Additionally, there has been a change in the sectoral structure of the economy which affects the economic opportunities of low-skilled workers, including a large share of newly arriving immigrants. The United States has shifted from an industrial-based economy to a service-based economy that predominantly generates jobs with limited opportunities for economic mobility (Chen, 2011). The modern structure of the U.S. economy, with many jobs in the service sectors and high-skilled occupations but a shrinking number in between—in combination with less than full transferability of education and experience acquired abroad—has made it difficult for low-skilled immigrants to work their way out of poverty.

Comparatively high levels of poverty among immigrant groups relative to the native-born translates into greater participation in safety net programs. Although safety net programs are aimed at low-income families, children, and the elderly, not all immigrants have access due to restrictions imposed by law. Unauthorized immigrants and individuals on nonimmigrant visas are not eligible for the Supplemental Nutrition Assistance Program (SNAP), nonemergency Medicaid, Supplemental Security Income (SSI), and Temporary Assistance for Needy Families (TANF). The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) and the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA) introduced additional restrictions. The former made lawful permanent residents (LPRs) and certain other lawfully residing immigrants ineligible for federal means-tested public benefit programs (such as Medicaid) for the first 5 years after receiving the relevant status. The latter also included a provision intended to prevent states from extending in-state tuition benefits to unauthorized immigrants. 18 LPRs who were previously eligible for assistance (before the enactment of these laws) became ineligible to receive assistance under the major federal benefits programs for a period of 5 years or longer. U.S.-born children of immigrants remained eligible for all programs, as they are citizens. Refugees and asylees also remained eligible for all programs. 19 Subsequent amendments to the 1996 legislation restored benefits to legal immigrants for certain programs; for example, in 2002 SNAP eligibility was extended to qualified immigrant children without a waiting period.

<sup>&</sup>lt;sup>18</sup>There is a difference between being eligible for a welfare program and accepting benefits (taking up welfare). Participation rate is a combination of being eligible and taking up welfare.

<sup>&</sup>lt;sup>19</sup>Capps et al. (2009) used CPS data to track welfare usage by refugee and asylees families between 1994 and 2004. There were sharp declines in TANF use, Medicaid and State Children's Health Insurance Program coverage, and SNAP and SSI participation rates during that period.

## THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

One feature of PRWORA and IIRIRA is that states were allowed the option of providing fully state-funded safety net programs to legal immigrants not covered by federal programs. For example, several states or counties provide health coverage to children and/or pregnant women without a waiting period, regardless of their immigration status (Broder and Blazer, 2011). A report by the Pew Charitable Trusts (2014b) documented that 40 states and the District of Columbia either "supplement federal benefits programs with programs funded only by the states, or take the Unborn Child or CHIPRA [Children's Health Insurance Program Reauthorization Act of 2009] options that expand the federal programs with state and federal matching funds . . . [while] only 10 states have neither provided their own programs for immigrants nor taken up one of the federal-state options to expand eligibility."

While not carrying implications of the same magnitude as factors such as education and health, use of welfare programs certainly factors into the fiscal impact of immigration. Table 3-15, updating Camarota (2011), reports welfare usage by state for immigrant households with children and households led by native-born persons with children. Overall, these data show that the immigrant households use several programs, most notably food assistance and Medicaid, at higher rates than do households led by the native-born. The states with the highest usage rates for immigrantheaded households are Louisiana (77.8%), South Dakota (73.8%), New Mexico (72.5%) and Kansas (70.6%), while for native-headed households the highest-usage states are Arkansas (59.4%), Mississippi (55.2%), New Mexico (53.3%) and Louisiana (53.0%). The gap between immigrant and native-born welfare use is largest in Colorado, Minnesota, South Dakota, and Wisconsin. In these four states, immigrant households with children have a usage rate for any welfare that is an average 33 percentage points higher than the usage rate for native-born counterparts.

This higher use of welfare programs by immigrants is attributable to their lower average incomes and larger families. Bitler and Hoynes (2013) used 1995-2010 CPS data on TANF, food stamps (SNAP), Medicaid, State Children's Health Insurance Program (SCHIP), SSI, school lunch, Low-Income Home Energy Assistance Program, and housing benefits to compare household-level participation in welfare programs between immigrant and native households with incomes less than 200 percent of the federal poverty level.<sup>20</sup> The authors found that, among these lower-income households with children, those led by immigrants participated in some safety net programs at lower rates than did native-led households. This was evident for the 1995-2010 period for cash welfare, food stamps, and SSI. The authors

 $<sup>^{20}</sup>$ For the Bitler and Hoynes (2013) study, immigrant or native-born status was determined by the nativity of the household head.

went on to report that "children who are themselves immigrants are less likely to participate in Medicaid/SCHIP across the entire time period as well, and native children of immigrant parents about as likely as children of native parents to participate" (Bitler and Hoynes, 2013, p. 16). The main exception, they noted, was in the school lunch program, where low-income immigrant households with children consistently participated at higher rates than did native-born households. Figure 3-11 summarizes results from Bitler and Hoynes (2013). Graph (a), showing any safety net participation, is higher for low-income immigrant households than for corresponding native-born households primarily because of immigrant families' higher participation in the school lunch program.<sup>21</sup>

Borjas (2011) also examined poverty and program participation among immigrant children<sup>22</sup> using 1994-2009 CPS data on cash assistance, SNAP benefits, and Medicaid received by households. The children in that study were divided into four groups: (a) U.S.-born children who have one immigrant parent (mixed parentage), (b) U.S.-born children who have two immigrant parents, (c) foreign-born children who have two immigrant parents, and (d) U.S.-born children with U.S.-born parents. The analysis revealed that, even though poverty rates<sup>23</sup> decreased for children (whether U.S.-born or foreign-born) with two immigrant parents between 1996 and 2000, they have increased since 2007. As shown in Figure 3-12, they have also gone up for children of the native-born but not as quickly. Also, among the four groups of children, the poverty rate was highest for foreign-born children with two immigrant parents. Children of mixed parentage had a group poverty rate not significantly different from children of two native-born parents. A similar conclusion can be drawn from the Borjas (2011) analysis of program participation rates (see Figure 3-13). U.S.-born children with two immigrant parents have the highest program participation rates among the four groups. This is not a surprising outcome, as their parents are likely to have the lowest income and, since they are U.S. born, the children are eligible for various safety net programs.

<sup>&</sup>lt;sup>21</sup>Chapter 8 examines means-tested benefits by first, second, and third-plus generation immigrants (see Figure 8-15). The analysis there, based on 2011-2013 March CPS data, reveals that, between ages 20 and 60, the third-plus generation receives more means-tested antipoverty program benefits than either the first or second generations. Among the underlying factors are that recent arrivals do not qualify for many of these programs initially, and the second generation has a slightly more favorable socioeconomic status than does the third-plus generation. For a description of underreporting of means-tested transfer programs in the CPS and the Survey of Income and Program Participation, see Wheaton (2007).

<sup>&</sup>lt;sup>22</sup>Borjas (2011) defined immigrant children as those who are foreign born and migrate to the United States with their foreign-born parents and those who are U.S. born to one or two immigrant (foreign-born) parents.

<sup>&</sup>lt;sup>23</sup>The poverty rate is defined as the fraction of children in a particular group that is being raised in households where family income is below the poverty threshold.

# ase 1:18-cv-00068 Document 611-1 Filed on 11/04/22 in TXSD Page 701 of 7

THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

TABLE 3-15 Welfare Use of Households with Children, by State, Current Population Survey 2011-2013 (in percentage)

	Any Welfare		Cash Assista	ance
State	Immigrant	Native	Immigrant	Native
Alabama	52.4	49.5	1.1	8.4
Alaska	49.2	38.5	5.4	4.6
Arizona	55.1	42.6	3.0	5.5
Arkansas	69.1	59.4	5.0	7.3
California	61.5	40.7	9.5	9.4
Colorado	62.0	31.4	3.5	4.6
Connecticut	45.8	32.4	3.8	4.1
Delaware	58.2	41.0	3.2	7.2
District of Columbia	63.4	50.5	3.6	21.1
Florida	57.3	42.8	3.4	4.7
Georgia	51.2	45.0	2.0	4.5
Hawaii	55.3	45.9	8.1	6.9
Idaho	64.4	41.0	1.6	3.7
Illinois	59.1	41.6	2.0	4.3
Indiana	57.6	44.4	1.0	5.4
Iowa	50.5	40.3	3.2	4.9
Kansas	70.6	40.8	2.9	5.5
Kentucky	60.1	49.6	2.7	9.1
Louisiana	77.8	53.0	5.1	6.9
Maine	50.8	45.7	5.6	9.3
Maryland	42.3	31.7	1.1	4.0
Massachusetts	48.6	34.7	8.1	9.1
Michigan	48.3	43.6	6.1	7.4
Minnesota	66.9	29.1	11.4	4.4
Mississippi	45.9	55.2	4.5	7.9
Missouri	54.7	40.1	1.1	7.3
Montana	29.4	45.5	0.0	6.4
Nebraska	66.0	33.0	5.0	4.2
Nevada	49.5	36.6	4.4	4.1
New Hampshire	30.3	26.5	2.8	3.6
New Jersey	46.4	28.9	4.1	5.4
New Mexico	72.5	53.3	8.8	6.6
New York	64.2	42.2	7.8	7.4
North Carolina	58.6	44.3	2.3	5.8

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Native

Food Assistance

Immigrant

42.8 31.8 48.9 57.5 48.0 49.3 28.3 37.9 46.7 43.5 40.3 38.5 56.7 43.0 46.6 37.8 61.7 51.1 55.8 37.5 32.7 32.4 34.9 54.3 38.1 37.6 23.6 58.0 42.1 18.7 30.3 57.4 44.0 50.0

Native

Housing

**Immigrant** 

127

Native

Medicaid

**Immigrant** 

# SOCIOECONOMIC OUTCOMES OF IMMIGRANTS

1					
	38.2	5.1	4.3	39.5	41.6
}	24.1	5.2	4.7	41.7	30.0
)	30.4	0.9	2.9	39.4	34.5
	45.4	5.3	4.9	59.9	51.3
)	28.2	4.2	4.9	49.2	32.0
;	20.8	9.1	3.8	46.4	25.1
	20.6	3.4	6.6	39.6	27.6
)	28.7	5.6	8.1	45.0	34.8
,	40.0	8.6	24.0	53.7	46.0
	30.4	1.8	3.3	43.5	33.6
,	34.4	0.5	4.7	37.2	34.0
	29.2	13.8	8.7	41.4	39.3
,	33.1	2.1	4.2	42.7	32.1
)	29.7	0.8	5.1	49.7	35.2
	33.1	4.0	8.9	37.8	37.4
	28.9	0.8	1.8	37.9	34.0
	31.9	6.6	6.6	51.3	30.7
	39.4	7.1	5.1	50.1	40.8
	39.5	3.0	6.5	59.5	46.5
	33.3	28.0	5.3	47.0	40.9
	20.1	1.9	4.3	31.2	25.2
	22.5	13.0	7.5	44.5	31.2
	33.1	2.3	4.4	43.4	36.6
	19.3	12.2	3.5	54.2	23.5
	46.1	0.0	7.9	26.4	43.5
	29.5	6.5	5.2	47.8	30.9
	32.9	7.5	7.6	19.5	35.9
	24.9	13.6	4.3	38.9	23.5
	28.5	2.9	5.6	25.3	22.8
	13.6	2.0	2.3	21.5	23.3
	18.1	4.3	5.1	37.5	24.1
	35.9	9.3	5.6	62.3	44.6
	27.9	8.5	9.2	55.3	34.5
	35.0	4.0	5.0	49.4	37.1
					continue

ase 1:18-cv-00068 Document 611-1 Filed on 11/04/22 in TXSD Page 703 of 7

128 THE ECONOMIC AND FISCAL CONSEQUENCES OF IMMIGRATION

TABLE 3-15 Continued

	Any Welfare		Cash Assista	ance		
State	Immigrant	Native	Immigrant	Native		
North Dakota	30.7	34.9	0.0	3.9		
Ohio	66.5	44.2	4.6	7.8		
Oklahoma	57.4	52.3	2.2	6.7		
Oregon	51.9	44.3	4.9	6.7		
Pennsylvania	46.2	42.2	3.8	6.5		
Rhode Island	64.1	38.7	4.6	8.6		
South Carolina	56.1	46.5	1.2	6.0		
South Dakota	73.8	41.8	7.4	5.9		
Tennessee	58.1	46.8	4.9	7.8		
Texas	63.7	44.2	2.8	5.3		
Utah	57.0	32.1	2.2	3.5		
Vermont	57.5	52.5	8.9	7.7		
Virginia	34.3	28.5	2.2	4.7		
Washington	63.5	41.7	7.1	4.3		
West Virginia	27.1	49.9	20.3	8.5		
Wisconsin	67.9	36.9	5.7	4.8		
Wyoming	56.9	35.8	0.0	4.3		
TOTAL	58.2	41.8	5.5	6.3		

NOTES: Current Population Survey data for 2011, 2012, and 2013, restricted to households with at least one child under the age of 18. Immigrant households are based on the head of household's immigrant status (where the head of household is considered immigrant if they are not a citizen or are a naturalized citizen). "Any welfare" encompasses cash assistance (SSI and

# SOCIOECONOMIC OUTCOMES OF IMMIGRANTS

Food Assistance		Housing		Medicaid		
Immigrant	Native	Immigrant	Native	Immigrant	Native	
21.5	23.9	2.3	6.6	21.5	25.2	
55.9	34.9	3.3	5.5	55.8	35.1	
43.8	39.3	0.0	4.8	48.8	41.4	
44.4	33.6	3.1	3.9	39.6	36.2	
33.2	28.3	2.0	5.4	34.6	36.2	
51.3	27.7	10.8	9.6	50.2	33.4	
44.0	37.9	2.0	5.0	35.7	35.2	
56.6	33.0	15.8	8.4	61.1	33.9	
43.2	35.5	7.8	4.1	45.1	39.4	
55.2	34.6	1.8	5.8	45.6	33.9	
47.7	24.6	5.4	3.4	33.9	20.1	
33.1	31.0	21.2	4.6	47.7	47.9	
24.1	21.1	1.4	5.3	27.0	21.8	
52.8	30.4	8.7	3.8	55.2	33.2	
10.3	37.6	6.4	4.3	27.1	40.5	
59.2	25.8	1.7	3.2	50.4	32.4	
46.3	24.4	4.0	5.1	48.5	29.0	
45.3	30.6	4.2	5.3	45.7	33.8	

TANF), food assistance (WIC, free or reduced-price school lunch, and food stamps), housing assistance (public housing and rent subsidies), and Medicaid. SSI = Supplemenal Security Income; TANF = Temporary Assistance for Needy Families; WIC

= Special Supplemental Nutrition Program for Women, Infants, and Children.

SOURCE: Panel's calculations from Current Population Survey 2011-2013 data.